THE MARINE CORPS GAZETTE

FEBRUARY, 1944 OVERSEAS EDITION

GENERAL THOMAS HOLCOMB, USMC

Overseas Edition

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Out In the Boondocks. By James D. Horan and Gerald Frank 2.75

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The only eye-witness account of the last-ditch fight of the Marines on Wake Island.

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A collection of dynamic stories of Marines all over the world by the master story writer of the Marine Corps.

Joe Foss, Flying Marine. As told to Walter Simmons 2.50

The story of the greatest American ace of this war and his Flying Circus at Guadalcanal, told vividly in the first person.

History of the U. S. Marine Corps. By Colonel Clyde H. Metcalf, USMC 3.00

The standard history of the Marine Corps from 1775 to the opening of World War II.

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The official Army Air Forces' account of the 8th Bomber Command's first year over Europe.

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A thrilling account of the Flying Tigers and other American air groups in China under the command of Major General Chennault, who contributes a foreword to this book.

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A significant book for all Marines, setting forth the importance of amphibious operations, illustrated by history and by his own extensive experience.

THE MARINE CORPS ASSOCIATION

Headquarters, U. S. Marine Corps **WASHINGTON 25, D. C.**

THE MARINE CORPS GAZETTE

HEADQUARTERS, UNITED STATES MARINE CORPS

WASHINGTON 25, D. C.

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CONTENTS

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after the battles....

BOUGAINVILLE

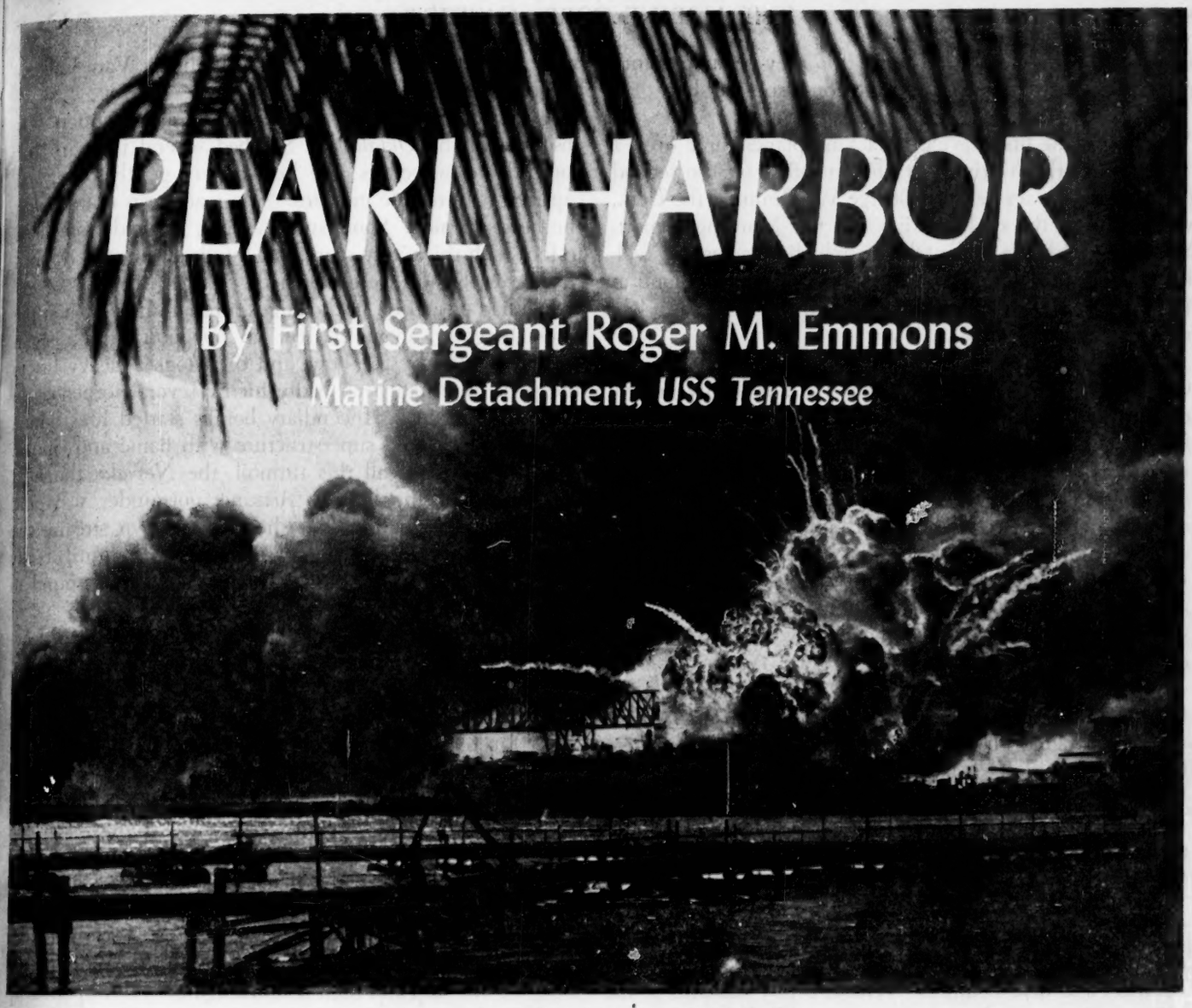
Battle-weary Marines of the Third Division hear words of praise from their commanding officer, Major General Allen H. Turnage, after the heroic invasion and capture of Cape Torokina.

TARAWA

High-ranking officers of the Marine Corps, Navy, and Army view the shell-blasted beaches of Betio. Left to right: Lieutenant General Robert C. Richardson, Jr., USA; Major General Charles F. B. Price, USMC; Admiral Chester A. Nimitz, USN, commander in chief Pacific Fleet, and (pointing) Major General Julian Smith, USMC, commanding the Second Marine Division, units of which took the island.

PEARL HARBOR

By First Sergeant Roger M. Emmons
Marine Detachment, *USS Tennessee*



MAGAZINE OF USS *SHAW* EXPLODES

This, one of the most remarkable combat photographs of all times, was made at the exact moment the destroyer blew up.

This narrative of the Marine Detachment of U.S.S. Tennessee *at the Battle of Pearl Harbor is taken from an account written immediately after the action. The sketch is not a description of the battle; it is merely an endeavor to state the experiences of the Marine Detachment during the attack. The accuracy of times and of statements, such as the number of Japanese planes, casualties, etc., is not guaranteed, but is in some instances sure to be at fault, for official records were not available, and no attempt has been made to change the narrative to conform to them.*

AT 7:55 a.m. on 7 December, 1941 (as all the world now knows), the Japanese made a surprise aerial attack on the U. S. Pacific Fleet in Pearl Harbor, Territory of Hawaii. The sole object of the attack was to annihilate the American fleet—battleships in particular.

The U.S.S. *Tennessee,* Captain C. E. Reordan commanding, was one of eight battleships which participated in the battle. On that occasion the *California, Maryland, Tennessee, Arizona,* and *Nevada,* respectively, were moored in single file at Ford Island in the middle of Pearl Harbor. The *Oklahoma* was berthed alongside the *Maryland,* while the *West Virginia* was beside the *Tennessee.* The eighth battleship, *Pennsylvania,* was in drydock at the Navy Yard. Other warships of various types were also present in the harbor.

It was a beautiful morning with fleecy clouds in the sky, and the visibility was good. Aboard the *Tennessee* the usual Sunday schedule prevailed. Many of the officers had gone ashore over the week end. The Marine Detachment was drawn up on the fantail for morning Colors, mess tables were being cleared away, some of the men were getting dressed preparatory to going on liberty, while others "batted-the-breeze" over their after-breakfast smoke. In its beginning the day was just another peaceful Sunday at the United States' largest naval base.

A few minutes before 7:55 a.m., several squadrons of mustard-yellow planes flew over the Hawaiian island of Oahu from the southwest, but this caused no alarm as military planes overhead were the usual thing. When those squadrons approached Pearl Harbor, they maneuvered into attack formations at low altitude over Merry's Point. At 7:55 a.m. wave after wave of those warplanes streamed across the harbor and hurled their deadly missiles upon the unsuspecting battle fleet. Every plane seemed to have

its objective selected in advance, for they separated into groups and each group concentrated on a specific ship.

WHEN the first wave of attacking planes came over, I was in the Marine Detachment office on the second deck of the *Tennessee*. Pfc George W. Dinning, the clerk, was seated at the desk making out the Morning Report. Suddenly we felt a violent bump which gave us the feeling that the ship had been pushed bodily sideways, and as I did not hear any explosion I remarked that some ship had run into us.

Immediately after that the alarm gongs sounded "General Quarters." I was so surprised that I could hardly believe my ears, but the noise of explosions through the open ports forced it upon me. George never did finish that Morning Report; he jumped seemingly sideways through the door and was gone like the wind. Snatching a detachment roster from the desk, I dashed after him.

My battle station was on the 5-inch broadside guns where I could see what actually was happening around us. I had a hurried look round from the casemates on the starboard side and then went over to the port side. The sky was dotted with black puffs of antiaircraft fire. A plane, trailing a plume of smoke, was plunging earthward over Ford Island. Off in the direction of Schofield Barracks, there was a vast cloud of black smoke. At the same time, two billowing pillars of smoke arose from the Navy Yard and Hickam Field area. The sky was full of planes bearing the Rising Sun emblem of Japan. Overhead dronned a flight of horizontal bombers at an altitude of about 10,000 feet. Some sixty enemy planes were diving at our ships.

Then a great many things happened in a very short time. The Japanese planes struck time and time again to get in the killing blows. First came aerial torpedoes, then heavy bombers and dive bombers. Within a few minutes of the commencement of the attack, we were hit direct two times by bombs.

One bomb bursting on the forward turret disabled one gun, and a fragment from it penetrated the shield on the bridge above killing a sailor, and severely wounding Ensign Donald M. Kable. The commander of the *West Virginia*, Captain Mervyn S. Bennion, was mortally wounded by a portion of this bomb when he emerged from the conning tower to the bridge of his ship. The second, a 15- or 16-inch projectile, which the enemy was using as a bomb, hit the aft turret, but fortunately, it did not explode, but pierced the top killing two men under the point of impact.

At about 8:00 a.m., a terrific explosion took place in our next astern, *Arizona*, which fairly lifted us in the water. She blew up in an enormous flame and a cloud of black smoke when her forward magazine exploded after a Japanese bomb had literally dropped down her funnel. Her back broken by the explosion, the entire forward portion of the ship canted away from the aft portion as the ship began to settle on the bottom.

It was a scene which cannot easily be forgotten—the *Arizona* was a mass of fire from bow to foremast, on deck and between decks, and the surface of the water for a large distance round was a mass of flaming oil from millions of gallons of fuel oil. Over a thousand dead men lay in her twisted wreck. Among those who perished were Rear Admiral Isaac C. Kidd and Captain Franklin Van Valkenburgh.

A few moments after this disaster, our attention was absorbed in the *Oklahoma*. Stabbed several times in her port side by torpedoes, she heeled very gently over, and capsized within nine minutes. The water was dotted with the heads of men. Some swam ashore, covered from head to foot with thick, oily scum, but hundreds of men trapped in the vessel's hull were drowned.

We had only been in the attack a few minutes when the *West Virginia*, about 20 feet on our port beam, began slowly to settle by the bow, and then took a heavy list to the port. She had been badly hit by several torpedoes in the opening attack. Incendiary bombs started fires which filled her decks and superstructure with flame and smoke.

In the midst of all this turmoil, the *Nevada*, the next ship astern of the blazing *Arizona*, got under way and headed for the channel. As she moved down stream, the vessel was a target of many enemy planes until badly crippled by a torpedo, and after that, she ran aground to prevent sinking.

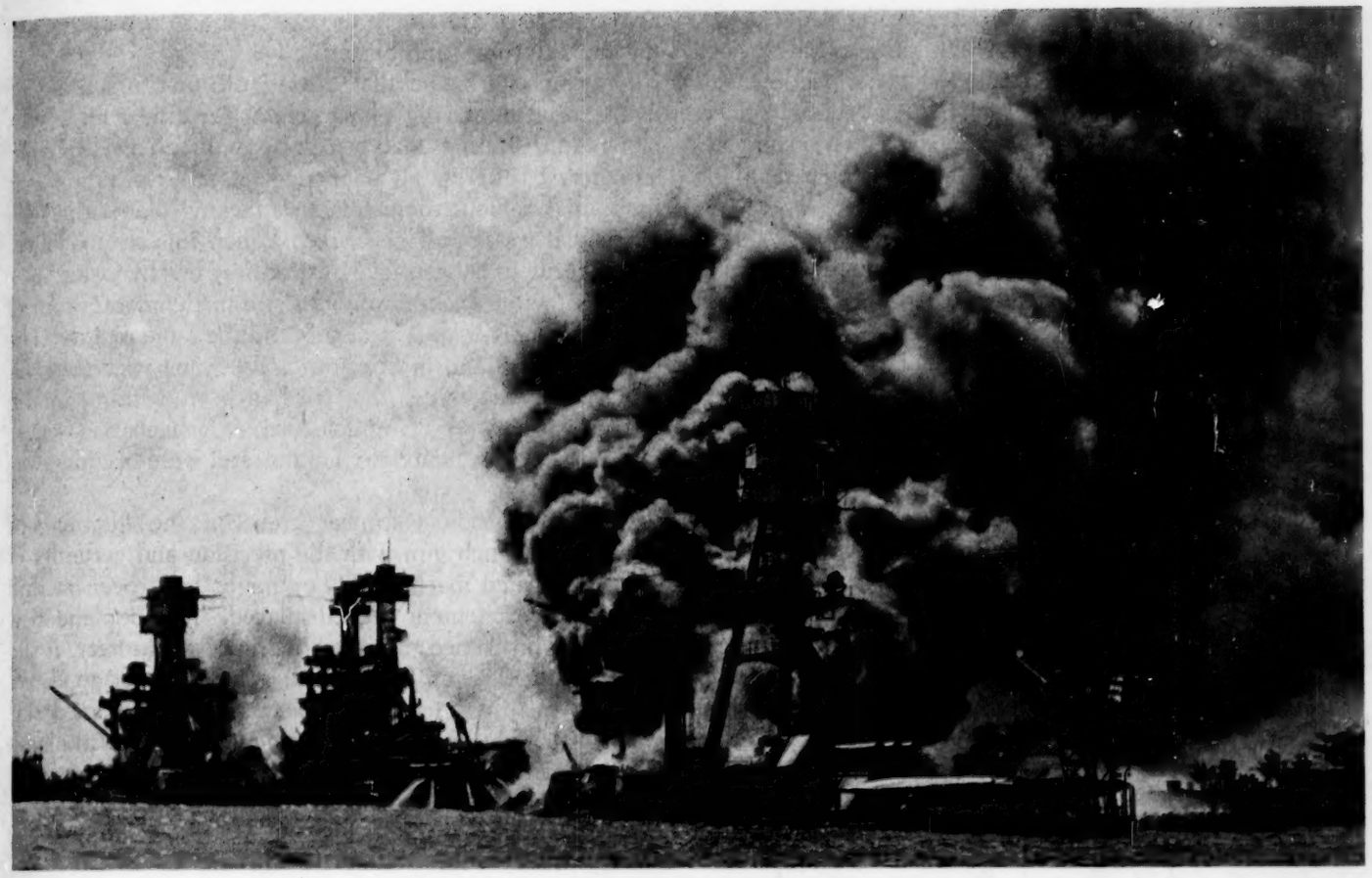
The next picture was a destroyer, name unknown, leaving the harbor under a withering fire from Japanese planes.

BUT to return to the *Tennessee*. The real story of this ship lies in the splendid manner in which the officers and men on board arose to the emergency. When "General Quarters" was sounded, all hands dashed to their battle stations. There was no panic. The shock found each and every man ready for his job. Antiaircraft and machine guns were quickly manned, the first gun getting into action in less than three minutes after the alarm.

For the next forty minutes, the *Tennessee* was the center of a whirlwind of bombs and bullets. The Japanese planes bombed our ship and then bombed again. They opened up with machine guns in low flying attacks. The ship's gun crews fought with utmost gallantry, and in a most tenacious and determined manner. They had no thought than to keep the guns going and thereby annihilate those "slant-

AFTER THE JAPANESE ATTACK

Warships damaged at Pearl Harbor in the Japanese attack of December 7, 1941.



STRICKEN FROM THE AIR

Testifying to the extent of the Japanese sneak attack on Pearl Harbor are these three stricken U. S. battleships. Left to right: USS *West Virginia,* severely damaged; USS *Tennessee,* damaged, and USS *Arizona,* sunk.

eyed sons-of-bitches" from the land of the Rising Sun. Hostile planes swooping down on what they thought an easy prey were greeted with volleys from our antiaircraft and machine guns. After such a warm reception, the Japanese airmen gave the *Tennessee* a wide berth.

So terrific was the noise of the explosions and our own antiaircraft guns that one could not hear himself speak and had to shout in anybody's ear. The air seemed to be full of fragments and flying pieces. In the general din, there was the *whoosh,* followed by a dull *whoomph* of huge explosives which struck so close to the ship that she shivered from end to end.

THE marines were stationed on the 5-inch broadside guns numbers 6, 7, 8, 9, and 10. They had nothing active to do at the beginning of the action—any firing by the broadside batteries was absolutely out of the question as the port guns trained on the adjacent *West Virginia,* while the starboard guns aimed at Ford Island. They had simply to stand-by under a heavy aerial assault unable to reply; or to put it in the vernacular of the marines in casemate No. 10, "We felt like bastards at a family reunion."

Captain Chevey S. White, in command of the marines, seeing that it was no use keeping the marines on the broadside batteries, sent a volunteer crew to man the 3-inch gun on the starboard side of the quarter-deck, and the surplus were given a chance to fight it out with ancient Lewis machine guns placed in advantageous positions about the ship.

There was an interval of comparative calm, which seemed a good opportunity to ascertain the casualties suffered by the marines and make a report to Captain White. Accordingly, I began a tour of the assumed battle stations, checking the men by that roster which I had brought with me. I counted 76; there had been 81.

My next job then was to take a look round the ship for the men missing. Naturally, my first thought was to see if they were among the wounded. Went below to second deck, where sick bay was located. The passage-way outside the ward was covered with men lying on mattresses or on cots. Stepping carefully between the rows of maimed, burned and bleeding, I groped my way to the surgeon's office. A hospital corpsman informed me that no marines appeared on the casualty list.

Then I crossed over to Marine office on the port side, and found the lock had been knocked off the door by a working party detailed to secure all battle ports. Thought it would be just as well to gather up our service record books in case it was necessary to quickly abandon ship, so I put the records in my pillowcase and carried them up to casemate No. 10.

Coming on deck again, I met Lieutenant Hugh J. Chapman, who had recently joined the detachment. He was occupied in organizing ammunition supply parties. Throughout the attack, he rendered invaluable service, directing the distribution of ammunition to guns requiring it.

Someone told me there were a few marines manning the main-top, some 70 or 80 feet above the deck, access to which

could be gained by ascending a series of iron ladders running up the interior of the mast. Deciding to have a look there for the missing men, I clambered up the ladders, past the first landing, through a belt of hot acid funnel smoke, and was half-way to the top when enemy planes suddenly reappeared and soon we were in the thick of a bombing and strafing attack.

Appreciating that I might momentarily expect to be blown or shot off the mast, I thought for a few seconds, "Should I go up or down," and decided on the former. I didn't waste much time in climbing up the ladder into the top through the "lubber's hole." When I stepped on the platform, my feet slipped out from under me and it was nothing short of a miracle that I didn't fall down the hole and get mashed up. Looked around to see what the trouble was, and discovered the source to be an overturned bucket of aluminum paint. Corporal George C. Westover afterwards told me that he was painting there when the blitz started.

IT is difficult to write clearly of the details of this attack for the whole thing outdid the most imaginative picture of a battle. The Japs dive-bombed our ships again and again, while low-flying planes, no more than 100 feet above the water, strafed the gun crews. They flew to the end of the bay, made a turn, and came back. For about twenty minutes the strafing attack kept up, the planes going continuously up and down, spraying the long row of battleships with machine-gun bullets.

In the general din, I could hear the staccato bark of the pom-poms on the *Maryland* just ahead of us. There was something tremendously heartening about the sound of them, and the very noise was inspiring. After what seemed ages to me, some of the raiders left and the sky was clearer.

On the main-top I found four of the missing marines, where also were Lieutenant Ernest C. Fusan and Gunnery Sergeant Porter W. Stark. They were craning their necks at the yardarm which had been struck by a bomb.

A terrible scene of destruction was revealed to me as I took a general look round. The *West Virginia* just abeam of us was flaming furiously. Only the bottom of the *Oklahoma* was visible. The *Arizona* was an inferno now, emitting dense volumes of oily smoke which hung over the harbor like a funeral pall. Our next ahead, *Maryland,* was hit by a large bomb on the forecastle which penetrated the deck and made an ugly hole in her port bow. An armor-piercing bomb had exploded in one of the casemates on the *Pennsylvania.* Looking toward the *California,* I noticed that she had a heavy list to the port side, and smoke appeared to be coming from her. The *Nevada* had been run hard ashore, in a sinking condition.

One had a none too cheerful feeling at the thought that five of our eight battleships had been sunk or badly damaged in the attack. In addition to these, three destroyers and a mine layer were sunk. The old target ship, *Utah,* moored at the place usually occupied by the aircraft carrier *Lexington,* had capsized as result of being torpedoed.

My attention was called by Sergeant Stark to the bridge of the *West Virginia* below us. Her Captain was lying there mortally wounded. Rescue parties could not reach him because the bridge was wreathed in fire and smoke. Still capable of movement, he was trying to roll away from the choking fumes and blistering heat.

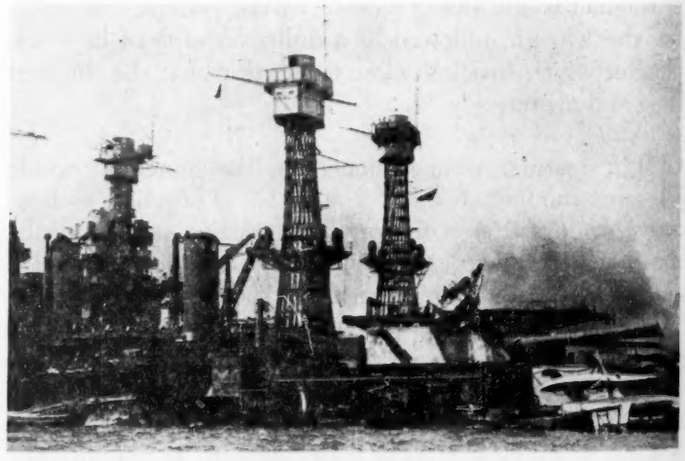
Sergeant Stark said that during the first attack a low-flying torpedo-carrying plane coming in astern of us was blown into infinitesimal pieces by a direct hit from our antiaircraft batteries. It happened, literally speaking, in a flash; one moment there was an attacking plane; the next moment it was a puff of smoke. When this cleared, there was nothing to be seen save dust settling on the water.

I then got down from the tops and made another tour of the battle stations, and at each found the same picture. The men were cool and in fine spirit. Everyone was doing his utmost, and the things that we had been training for for many months were being achieved. The men had set up machine guns on temporary mounts and were blazing away at the attackers.

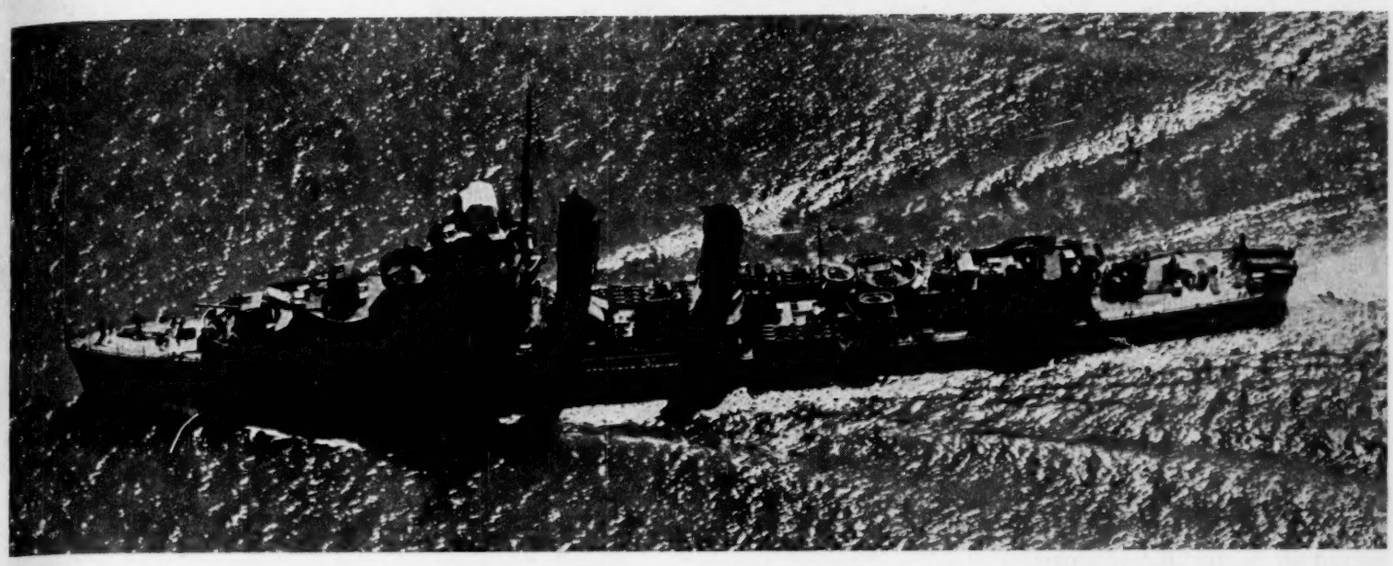
Corporal Flood's volunteer crew on the quarter-deck worked the 3-inch gun with the precision and certainty of a well-regulated machine. They might have been at drill for all the excitement they displayed. A Jap plane flew over; the gun flamed, it roared, it leaped to the rear, it slid to the front; the gun was loaded; another target appeared, the gun was fired again, and the projectile screamed skyward. I thought these men performed their duties in a most efficient manner despite the fact that they had no previous experience in the use of that particular type gun. The members of gun crew were Corp. Warren K. Flood, Pfc George W. Dinning, Pvts. Robert H. Stinecipher, Jr., George H. Tarver, and Benjamin F. Williams, Jr.

Sergeant Frederick E. Franks (Xenia, Ohio) was in charge of a detail handling the 3-inch ammunition. In constant danger of being blown to bits, the men in this party carried ammunition from aft magazine to the gun with much enthusiasm and energy.

Went up on the bridge and located the last two of the missing marines. They were manning a .50 caliber machine gun which Field Cook Clay H. Gee had carried to the bridge and set up in the face of severe enemy bombing and strafing. Other marines on this gun were Pfc Delbert



Battered by aerial torpedoes and bomb hits, the 31,800-ton USS *West Virginia* (nearest ship) rests on the bottom of Pearl Harbor. Fire following the explosions as well as oil flames from the nearby sunken USS *Arizona* added extensively to the damage. Note the wrecked scout plane topside of gun turret at right and the overturned plane in the right hand corner. The USS *Tennessee* is in the background.



Resurgence. With a new bow, the destroyer USS *Shaw,* severely damaged at Pearl Harbor, rides forth to avenge December 7, 1941. Many of the ships apparently destroyed lived to fight again in combat with the Japs.

W. Johnson, Pfc Ralph F. Haws, and Pvt. Roy D. Kelly. While there I came upon the body of a sailor who had been killed by bomb fragments which penetrated the bridge shield as if it was tissue paper. He was propped in a sitting position and still wore head phones.

I was astonished to find that the only casualty among the marines was Sergeant Walter Holland, injured in the right foot by flying debris or bomb fragment while operating with Group I, Machine Guns, but despite his injury, he continued to work at the guns.

Then I went in search of Captain White and found him standing coolly on the quarter-deck occupied in estimating the situation, giving orders, and receiving reports. I reported to him and then continued touring the battle stations to see how things were faring.

On one of my expeditions I was surprised to find a soldier at a battle station. He had come aboard that morning to visit Pfc Coy R. Tyson, and when "General Quarters" sounded, he was ordered by Sergeant Stark to go along with Tyson to his action station.

Very early in the action an incident occurred which history may record as the first hand-to-hand encounter of the American-Japanese War. A Nipponese plane crashed on Ford Island near us, and the uninjured pilot started running toward a nearby clump of trees when a marine sentry with a bayoneted rifle intervened. The flier took out his pistol and attempted to shoot the marine, but the latter plunged his bayonet into the Jap until he was dead. I personally did not see this, but some of the ship's company were witnesses.

EVENTUALLY the attackers gradually flew away, and toward 10:15 a.m., I saw one solitary Jap plane disappear beyond the mountain in back of Pearl Harbor. The action for us was ended although we did not think so at the time. The exact number of enemy planes disposed of could not be ascertained with any certainty, but my impression was that it was not very large. We, of course, did not know where the attackers came from, but thought they came from land bases as well as from aircraft carriers.

Most disappointing on this occasion was the total absence of our own aircraft. During the attack on Pearl Harbor itself, there was not one American plane to be seen in the sky. Those who participated in the battle had one thought, one question: "Where in hell is our air force?"

I have said little about the navy personnel in this narrative for I was fully occupied during the action with the marines and had little time to observe the sailors, except the antiaircraft crews on which the blunt of the fighting fell. They were perfect. Their lot was the hardest, for it takes rugged men to stick to their guns as dive bombers come screaming at them, and low-flying planes spray the decks with machine-gun bullets. Ignoring the bombs and strafing, these navy gunners pumped a hail of metal above the harbor just as coolly as if they were at target practice and accounted for several raiders. No praise can be too high for them.

It might be mentioned here that the *Tennessee's* casualties were only 6 men killed or died of wounds, 1 officer and 36 men wounded, and 1 man missing, which was really an astonishingly light number considering the total casualties in the attack.

The most vivid impression of the battle left to all of us was the suddenness and unexpectedness of the whole incident. Although the powers that be may have known that something more than usual was in the wind, the men were certainly unaware that anything was likely to happen. The first inkling we received that there was something doing was when the Japanese planes streamed across the harbor and hurled their torpedoes into our warships.

IT will never cease to be a source of wonder to me that we did not share the fate of the *Arizona.* One may attribute our comparative immunity to the following:

1. The Grace of God—for an armor-piercing bomb, deflected by the yardarm, struck the roof of the aft turret a glancing blow. Had the yardarm not been in its path, the projectile would have penetrated the turret and detonated in the aft magazine.

2. That the *West Virginia* berthed alongside shielded us from the torpedo planes.

3. The bravery and persistency of our antiaircraft gun crews in fighting to the fullest extent of their ability and

equipment. Their fire was so heavy that the Japanese bombers were forced to swerve off course, causing their bombs to fall short of the *Tennessee*.

4. That so few hits were obtained considering the number and proximity of the bombs that fell round us. We compared notes afterwards, and decided that during the battle, about eighteen to twenty bombs fell within 100 yards of the ship.

5. That at times the *Tennessee* was entirely hidden by huge smoke clouds drifting from the *Arizona* and *West Virginia*.

Scenes about the ship, after the battle, beggar description. The water surrounding the *Tennessee* was covered with burning oil, which spread from the *Arizona*, and fire brigades were engaged in a desperate fight for two days to save the ship. During this time, damage control parties fought for many hours to extinguish a large fire that had started aft in the officers' quarters.

In the meanwhile casualties and survivors from other ships began to arrive. That afternoon ten survivors of the *Arizona* Marine Detachment were received on board. Among them was Captain John H. Earle, Jr., who had assumed command on the previous day. Prior to his transfer on the 6th of December, Captain Earle had been detachment officer on the *Tennessee* and we were thankful to see him turn up alive. It was a great shock to us when he informed us that of the eighty-seven marines who formed the *Arizona* detachment, only thirteen were able to escape, and the other seventy-three had perished.

Most of the survivors had been in the main-top when the ship blew up and in some miraculous way, in spite of the intense heat and choking smoke, they climbed down the mast, jumped overboard, and swam ashore through patches of oil burning on the water. The only injury received by the swimmers was "sore guts" caused by shock of bombs exploding in the water.

Among those who perished was the First Sergeant of the *Arizona*—Sergeant John Duveene. The survivors told us that after coming up on deck, Sergeant Duveene suddenly went back into the ship with the object of recovering the detachment's vital records. Presently he staggered on deck again badly burnt all over, his clothing on fire, but carrying the records. He leaped overboard and was never seen again.

During the rest of the night nothing further happened, except that all this time the *Arizona* had been burning fiercely, lighting up the harbor for a great distance, and, much to our discomfort, we were visible for miles round. She burned for two days.

U. S. Casualties More Than 140,000 Since War Began

CASUALTIES totalling more than 140,000 have been suffered by the American armed forces since the start of the war, according to a compilation made by the Associated Press from official sources, as of January 20, 1944.

The Navy has reported 35,257 casualties since the start of the war in all its branches—25,225 in the Navy, 9,590 in the Marine Corps, and 442 in the Coast Guard.

The totals are divided as follows:

Army casualties, all theaters, through December 23—Killed, 16,831; wounded, 38,916; missing, 24,067; prisoners of war, 25,415.

(Army casualties in Italy to date—Killed, 2,985; wounded, 12,504; missing, 3,721.)

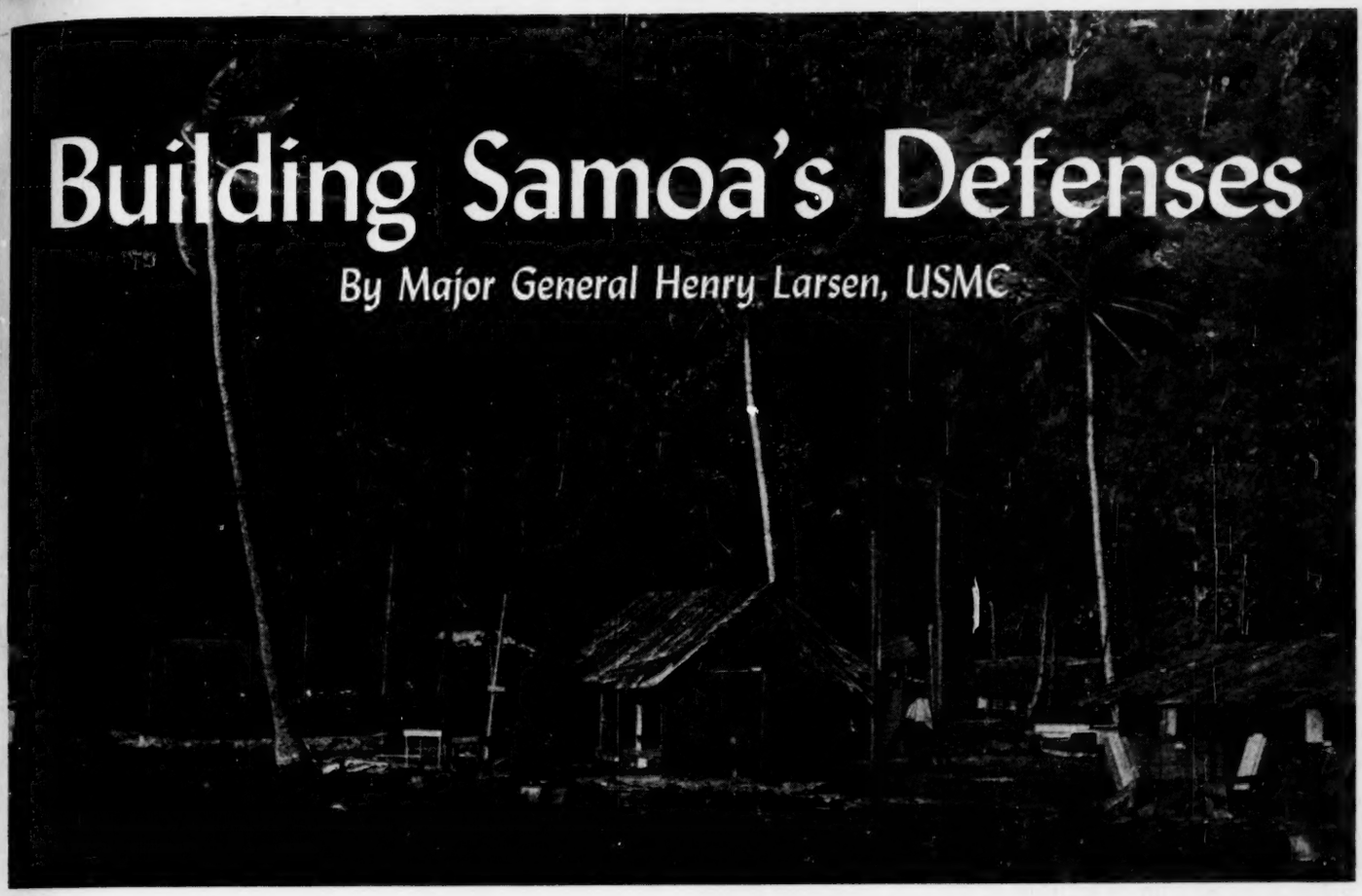
Navy casualties—Killed, 11,976; wounded, 3,136; missing, 7,778; prisoners, 2,335.

Marine Corps—Killed, 3,193; wounded, 3,763; missing, 686; prisoners, 1,948.

Coast Guard—Killed, 316; wounded, 78; missing, 47; prisoner, 1.

Building Samoa's Defenses

By Major General Henry Larsen, USMC



THAT logistics are the backbone of any nation's effort in global warfare is an undisputed military truism. It was acknowledged as such on 7 December, 1941, when Japanese storm clouds tore the Pacific apart and brought the United States High Command face to face with two immediately urgent problems—the defense of the mainland and the maintenance of Pacific supply lines.

The little island of Tutuila in American Samoa, right at the point of the offensive arrow constituted by the Japanese mandated Marshall and Gilbert Islands, overnight became of almost unparalleled strategic value. It was foreseen that enemy occupation of this hitherto neglected United States naval base would cut the Pacific Ocean in half, separating Australia and New Zealand from America and establishing an insurmountable blockade of east-west Pacific shipping.

In less than three weeks the Marine Corps had an answer to this threat. On 24 December, 1941, the Second Marine Brigade, Second Marine Division, Fleet Marine Force, was created at Camp Elliott, California, for the sole purpose of Samoan defense.

Four days later my staff and I had completed a survey of special equipment needed for our task in the South Pacific, and had received permission from Headquarters, Marine Corps, to expend up to $200,000 in purchasing necessary engineering equipment in the open market. Medical and other supplies required were similarly procured. Meanwhile, the entire personnel of the brigade worked at top speed all during the last week of December. Details of organization and equipment were settled, clothing issued and plans prepared for embarkation.

It was during this period that my appointment as brigadier general was made. Members of the brigade general staff were: Lieutenant Colonel Victor F. Bleasdale, Chief of Staff; Captain Peter A. McDonald, B-1 (Personnel); Lieutenant Colonel William L. Bales, B-2 (Military Intelligence); Captain Fred D. Beans, B-3 (Operations); and Major Howard R. Huff, B-4 (Supply).

Principal units integrated into the organization were: The Eighth Marine Regiment; the First Battalion, Tenth Marines (artillery); and the Second Defense Battalion. The Eighth Marines, under command of Lieutenant Colonel Richard H. Jeschke, who had just relieved me after I had been in command since its organization in 1940, the First Battalion, Tenth Marines, with Lieutenant Colonel Louis G. DeHaven commanding, and the Second Defense Battalion under command of Lieutenant Colonel Raymond E. Knapp, respectively, were all considered excellently trained units. For the past twelve months of peace, they had all been drilling and maneuvering on a wartime basis in preparation for just such an assignment as this. Organizations of engineers, armored cars, aviation, medical companies, headquarters and service troops, military police and others constituted the force.

By the first of the year embarkation plans had been outlined, and several transports and cargo ships assigned the job of carrying the brigade to its new base.

THE first ship arrived in San Diego on 1 January, 1942, and loading operations began at once. The other ships docked two days later. Working parties of nearly one thousand men labored continually on the docks in twelve hour shifts so that the entire operation was completed in a little over sixty hours.

While the ships were being loaded, and the brigade was preparing for duty overseas, new combat units were con-

stantly being attached to the organization and additional equipment was arriving night and day by every conceivable means of transport. It's not Marine style to get there too late nor with too little.

On 2 January a conference of all organizational commanders and their executive officers was ordered and all were informed of the preliminary plans for Samoan defense. Specific missions and other details were assigned, military maps were distributed, and it was contemplated that additional and more detailed operational plans would be worked out en route.

At 1215 on the afternoon of 6 January, 1942, the Second Marine Brigade sailed from San Diego Harbor through enemy submarine-infested waters, thirteen days and a few hours after the order was received authorizing the formation of the unit. This command constituted the first American Expeditionary Force to leave the United States following the declaration of war. There were no absentees; not one of the nearly 5,000 officers, warrant officers, and enlisted men missed the sailing of the convoy.

During the 4500 mile trip, the ships were under strong naval convoy. Because of the extreme strategic importance of Samoa in the Pacific logistic set-up, there seemed little doubt that the enemy would do his utmost to prevent the safe arrival of the defense force. With attack an apparent certainty we concentrated every minute on the dual goals of maintaining utmost security at sea and preparing troops for immediate disembarkation and dispersal to defense positions in Samoa.

All the transports manned guns continually with constant lookout. There were the traditional fire drills, boat drills, and action alarms, along with instruction in the use of gas masks and black-out precautions. Gradually the men were "shaken down"; they became accustomed to transport life and to working together. Unimportant kinks that had disclosed themselves during the amazingly swift organization of the brigade were worked out, and the unit became better and better integrated.

Meanwhile, disembarkation plans were polished up. Each man was told what uniform to wear, what equipment to carry, and how much ammunition he should have. Assembly areas and equipment dumps were assigned, a communication system set up, rations arranged for and temporary billeting plans made—all this and much more was done while the convoy was several thousand miles from its destination. Instructions were issued en route defining the status of our men vis-a-vis the native population and thoroughly indoctrinating our men with the importance of establishing and maintaining friendly relations with the natives. This later proved to be of immense value.

In spite of the constant threat of powerful enemy attack, no contact was made with any Japanese air, surface or underwater craft. This good fortune was probably due to the size, strength, and disposition of the convoy.

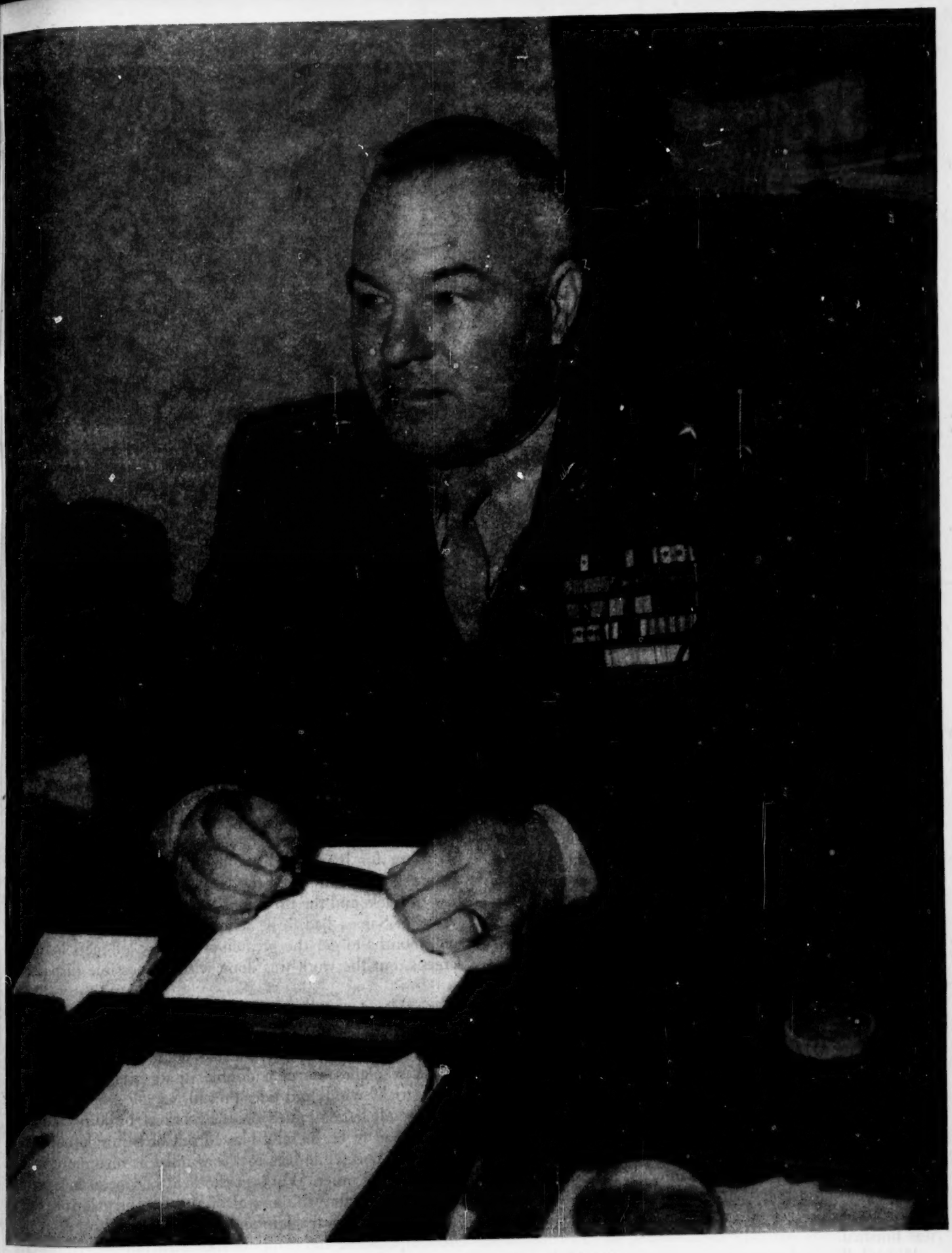
En route, a dispatch was received from the President appointing me Military Governor of American Samoa, and giving me full military authority, and complete jurisdiction over the government of the entire area, the only United States possession south of the equator.

IN less than thirty days after the Second Marine Brigade was created in San Diego, the convoy entered Pago Pago harbor. In less than four weeks a unit had been organized, equipped and transported 4,500 miles safely and without loss of a man.

Before the arrival of the brigade, the Samoan Defense Force had consisted of one defense battalion of about 500 men, enough to hold the island for only a few hours against any powerful attack.* Naturally, the arrival of our large defense force was greeted with widespread relief by all the

*See "Guarding the Crossroads," MARINE CORPS GAZETTE, January 1944, pp. 17-18.

The first plane to land on the Samoan airfield. General Larsen was the passenger and his aide-de-camp, Major R. Hughes, was the pilot.



Major General Henry L. Larsen, USMC

natives, the local whites, and members of the small garrison. The too fresh memory of the island's recent bombardment by a Japanese submarine on 11 January while the convoy was en route there, made the welcome doubly enthusiastic.

Our real job, however, was just starting. Men and equipment were still aboard the very vulnerable ships and time became even more valuable than it had been in San Diego.

The first transport entered the harbor around nine one morning. Though there was only one short, shaky dock, the entire personnel of the brigade was disembarked and in assembly areas within five hours. All the small boats in the harbor together with life boats and motor launches carried by the transports participated in this transfer. While unloading proceeded on a 24-hour schedule with four shifts of six hours each, machine gun emplacements were set up around the harbor for antiaircraft protection. My first proclamation, printed in Samoan and English, assuming office as Military Governor, was published at this time.

Operations went on with an urgency backed by the constant threat of an enemy attack in force. Censorship was established and warnings were issued against infringements of native property rights, liberties, freedom of religion and traditional customs. But the chief concern of all was the establishment of the island defenses.

Within forty-eight hours after the ships came into the harbor, some artillery emplacements had been constructed on strategic points, defense areas had been completely outlined, and refrigeration plants had been set up.

By 25 January, after herculean effort exerted by all hands, the last of the transports had been unloaded, all dependents had been evacuated, and many of the organizations of the brigade had established themselves around the island. Detailed maps had been issued to all officers and senior NCO's, and Tutuila had the aspect of a large, teeming military base.

FOR more than a month after disembarkation all hands manned "stand-to" stations before sunrise, and artillery and AA installations as well as machine gun posts and sentries were constantly on the alert.

Beside the tremendous pressure for speed, the rugged characteristics of the island base imposed serious problems to our brigade.

South of the equator, January is midsummer. This is also the rainiest month of the year in one of the wettest areas in the world. Enervating heat, armies of mosquitoes, knee-deep sticky mud, torrential rains which sometimes hit five inches a day, combined with the coral-sharp, precipitous terrain took some pleasure out of the opportunity to work twelve to fourteen hours a day in a "Pacific Paradise." There was no complaining though. A year's tough training had hardened these Marines and they were anxious to get their defenses ready for the enemy. Water sogged tents pitched atop mud holes wherever level ground was found couldn't keep these tired men awake when their daily job was finished.

Work fell into three major classifications: (1) Readying of actual defenses and preparation of bivouac areas; (2) completion of the island's first airport; and (3) general utility work such as road building, construction of dams,

A native Samoan is sworn in as a full-fledged member of the U. S. Marine Corps. Note the Samoan Sergeant, with Marine Corps insignia and chevrons on his lava-lava.

the establishment of communications and of fuel and supply depots. Each of these classifications was urgent, and neither one could be entirely set aside in favor of the others.

Time was life itself. The Japanese sweep in the Southwest Pacific hadn't lost any of its momentum and large land areas were being seized daily. Defense of Samoa grew more and more important as it became ever more clear that near this island lay the only supply route still open to the fighting fronts. As careful study revealed weak points along the coast, these areas were strengthened by men and weapons. Warning devices were put in place, and permanent splinter-proof command posts and artillery emplacements constructed in strategic areas.

Marines, white civilian contractors, Navy Seabees, and natives all toiled incessantly to ready the defenses. Nearly as important was the construction of camouflaged *fales* (native term for house or hut) to get the men out of the dampness and away from the bugs. Men can't fight when they are sick, and the privations and discomforts of the first weeks in Samoa had to be reduced as soon as possible. It took months to get the greater percentage of men behind screens, but the work was done with all possible dispatch.

NOT the least in importance was the vital need for an airport. The few Navy seaplanes which accompanied our reinforced brigade alone could not stop a powerful air attack; seaplanes are at a double disadvantage in Samoa where tricky winds and tides prevail.

Again all hands joined on the work of building a new field; it had to be literally blasted out of a jungle covered hill at one end while lava rock was piled as revetment into the sea at the other. Work on the field had been meagerly inaugurated before the arrival of the Second Marine Brigade, but now with additional authority, concentration of effort, equipment and manpower, construction moved faster. The initial runway was usable within two weeks, but it was not until 6 March that the first plane, carrying me back from a reconnaissance trip to some adjacent islands, landed there. From this point the quality of the field began to de-

velop more rapidly. The runway was gradually lengthened as hundreds of thousands of tons of coral and volcanic rock grew into a huge ocean fill.

Dispersal areas, fuel and mechanical facilities, and defense installations were improved continuously. By the end of 1942 the airport was acknowledged to be one of the best in the South Pacific. Nearly every type of Navy, Marine, and Army plane has used the facilities of the base.

During the first months here, we found it necessary, as a defense measure, to place great emphasis on the construction of roads and communication systems.

When Samoa was maintained as a rather small naval base, almost all of the activity and construction was in the immediate area of Pago Pago harbor. The threat of attack made all of Samoa vulnerable and defenses could not be restricted to this one area.

When the brigade disembarked, there were less than twenty miles of passable roadway on the island. It was possible to drive along the west side of Pago Pago harbor and down to Leone on the south shore of the island, but that was all. Existing roads were vastly improved, and the system extended so that it was soon possible to drive from one end of the island to the other. An epic of military road-building was performed by Marine engineer troops who in six weeks built the first north-south road over the mountain and across the island. One officer and ten men battled torrential rains in blasting the passage across Tutuila's almost perpendicular spine.

While this work was progressing, the signal troops honeycombed the area with field telephone installations and new exchanges were set up to cover the gradually increasing garrison. For the first time, it was possible to telephone from one end of the island to the other.

Along with roads and communications, various other military facilities were rapidly developed. Fuel tanks were erected, deep wells and reservoirs constructed, and finally a second all-purpose dock was completed. The net depot, seaplane ramp, and repair facilities which we built also formed valuable adjuncts to the base.

Tutuila, long nothing more than a slumbering Navy outpost manned by a handful of men and officers and the Samoan "Fita Fita" Guard, was fast becoming a naval base of huge proportions.

IF this spectacular military development had been the sole accomplishment of the Second Marine Brigade, the results would have been commendable. Since it represents only a part of the constructive work completed, there is ample cause for gratification on the part of all who participated in the work.

As a training base the island of Tutuila has many invaluable assets. Its very discomforts—the rain and heat and insects—contribute to this utility. There are no wild animals or poisonous reptiles. Men trained here would be experienced in jungle life long before they meet the enemy; thus they would not be subject to the double shock of first action and first realization of the meaning of "jungle hell."

Utilizing this attribute of the island, we organized the Second Marine Brigade School, which included instruction in nearly every aspect of jungle warfare. Classes included: Officer Candidates; Rifle Platoon; Rifle Company; Infantry Weapons Platoon; Machine Gun; Japanese Language; Field Artillery; Antiaircraft Artillery; 81mm Mortar; Combat Intelligence; Cooking; Baking; and Communications. Each was of six to twelve weeks duration. Called jokingly "The West Point of Emerald Isle," the school was rated by old-time Marines to be the toughest in Leatherneck training history. Since the students all knew they were soon scheduled for combat, they welcomed the rugged schedule as invaluable preparation for and a sample of things to come.

Since the organization of the brigade school many hundreds of officers and men have graduated. Over 200 officer candidates selected from among the outstanding noncommissioned officers of the various organizations have been commissioned as second lieutenants and have made outstanding records in action among the heroes of the war to date.

Besides this extensive school system, a replacement training center was organized. Groups of men were brought to Tutuila fresh from boot camp, strenuously trained in jungle combat, and then sent to fill out the strength of other Marine organizations in the Pacific.

As a "jumping off place"—area from which troops embark for action—Tutuila also proved its value.

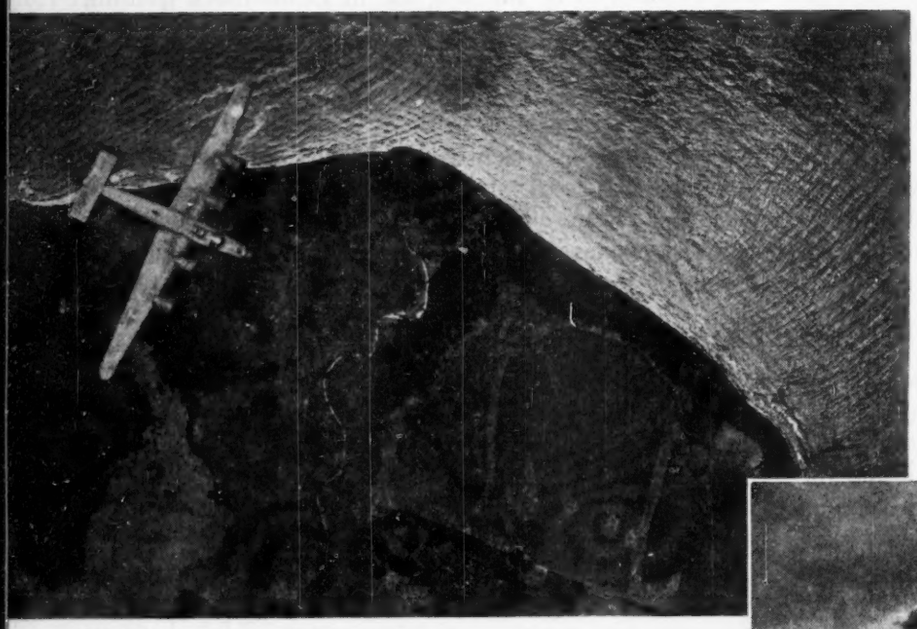
Whipping the defenses of Tutuila into shape, supervising the development of the island into a major base, organizing the extensive training system didn't keep us from other work. Exactly six days after the organization disembarked in Samoa, Lieutenant Colonel William L. Bales, Intelligence Officer, left the island for extensive reconnaissance on Savaii and Upolu, the major islands of Western Samoa (British).

Thus began another aspect of this command, for it was felt almost immediately that installations on Tutuila could be negated by enemy occupation of these larger islands to the west. As Military Governor it fell to me to investigate the strategic aspects of both Savaii and Upolu; then to recommend which should be the site of United States' defense forces and of the American built air base. Upolu was decided upon as clearly the preferable of the two, and the Military Governor played a major part in the international negotiations for the military occupation, defense, and jurisdiction of Western Samoa.

Details settled, a detachment embarked on the hundred mile crossing to Apia, capital of Upolu and immediately began work on defense installations and on the construction of another large air base.

FIFTEEN months after the Second Marine Brigade was created in San Diego it was dissolved by order of the Commandant, U. S. Marine Corps. Organized at the outbreak of war in the urgent necessity of Samoan defense, the brigade had now fully served its purpose. During its period of "life" it had accomplished more than many much older organizations. Samoa had become one of the important bases in the South Pacific. Even the fact that the unit had seen no actual combat was a commendation for the efficiency of its performance. Had the enemy made an attack in this early phase in accordance with the Japanese basic war plans and a successful occupation of the base, it would have been a major victory for them, and might have added years to the length of the war.

CAPE GLOUCESTE



← Before the landing, Army Liberators and other planes pounded the Cape Gloucester airfield and Jap installations.

Army Air Force photo.

↓ As landing craft approach the Cape, Jap planes attacking them crash smoking into the sea.

Here is one of the LSTs, manned by the Navy and Coast Guard, and crammed with men and matériel for the invasion.

→ A truck radiator forms the altar piece as divine service is conducted on the deck of an LST for Marines about to land.

ER . . .

As the landing craft near shore, Jap bombs fall uncomfortably close to the invaders.

Pictures not otherwise credited are Coast Guard photos.

Ready for action, a tank splashes off the ramp of an LST and moves forward prepared to attack.

The ramp lowered, Marines wade ashore and mechanized equipment ploughs through the surf.

Meanwhile, across the island at Rabaul, the airfield at this important Jap base is pounded by American planes which leave many enemy ships burning on the ground.

Army Air Force photo

Soon the beach is filled with marching Marines, while other LSTs unload men and supplies.

Back to Makin

By Captain Garrett Graham, USMCR

ON Sunday, 20 November, 1943, the Navy issued a communique, in the customary colorless language of official communiques, announcing that "Marine Corps and Army forces, covered by powerful units of all types of the Pacific Fleet, established beachheads on Makin, Tarawa Atolls, Gilbert Islands; meeting moderate resistance at Makin and strong resistance at Tarawa. Fighting continues."

It was later revealed that Marine Lieutenant Colonel James Roosevelt participated in the Makin landing. The President's son was playing a return engagement in the same war theater where he won a Navy Cross some fifteen months before.

For nearly a year I had been carrying around a vivid recollection of another Sunday spent on a steaming little island in the South Pacific. That is, I think it was a Sunday. We didn't pay much attention to dates or days of the week out there. These were remembered by whether or not it didn't rain— which it generally did—by the arrival of mail from home, the miraculous appearance of a bottle of whiskey, or the filling of an inside straight, rather than by the calendar. Of course a lucky hit by Maytag Charlie, as the Jap night bombers were always called, might etch an occasion rather sharply on a man's brain, if his brain didn't happen to be splattered too widely over the surrounding landscape.

But this particular afternoon and evening have remained in my mind because I heard, from the lips of the man who led it, the inside story and the dramatic details of the first Makin Island raid. The man was Lieutenant Colonel Evans F. Carlson. The outfit he commanded was a task unit of his own 2d Marine Raider Battalion. The occasion of our meeting was the first anniversary of the battalion's organization.

He had hand-picked these boys from the general run of Marines and had trained them carefully for their specialized tasks. He had instilled in them an almost fanatical *esprit de corps*.

He had given them a slogan from the days of his extensive travels in China—*"Gung Ho!"* It was their war-cry, a match for the Japanese "Banzai!" It was supposed to indicate, as I understood it from Colonel Carlson, that, like The Three Musketeers, they were one for all and all for one.

The battalion was stationed in the Hawaiian Islands at the time of the raid. Later they had been shifted to the Solomons and had participated in the Guadalcanal campaign. Here they had made a landing behind the Japanese lines and had spent a full month in the bush, living off the jungle and what they had brought with them. They had ambushed enemy patrols, raided bivouac areas, disrupted supply and communication lines, and in every possible way added to the mounting misery of Hitler's little yellow Aryan allies.

I met them shortly after they had come out of the bush and were preparing to depart for New Zealand for a well-earned period of rest and recreation. They were definitely a seedy looking lot. Virtually all the survivors of that solid month in the jungle had malaria, many were a bright yellow with jaundice, all were haggard and worn from what they had been through, but in spirit they were still a cocky and self-confident outfit.

In a borrowed jeep I drove over to their bivouac area with a friend of mine who had known Colonel Carlson previously. He received us cordially, but begged our indulgence while he put the finishing touches on a hastily written speech he was about to deliver to his men.

The outfit assembled in a clearing in the center of their camp and the colonel spoke to them over the public address system which he carries everywhere they go. He believes in talking to his men frequently, and explaining the reason and purpose of each operation. It is one of his many unique theories in training those who fight with him.

All of us, officers and men alike, sat on the ground and listened. It was a moving speech—a speech to stir the emotions of the most cynical. But there were no cynics here. They had all just been through hell together. They knew he was spouting no phoney patriotism, nor boastful blather.

After chow, the colonel invited my friend and me to his tent where we talked until nearly midnight. The rain beat down on the canvas roof, and ran in rivulets about our feet. We slapped mosquitoes, smoked innumerable cigarettes, and polished off the last of our host's whiskey, as he was shortly sailing to a place where he could get more.

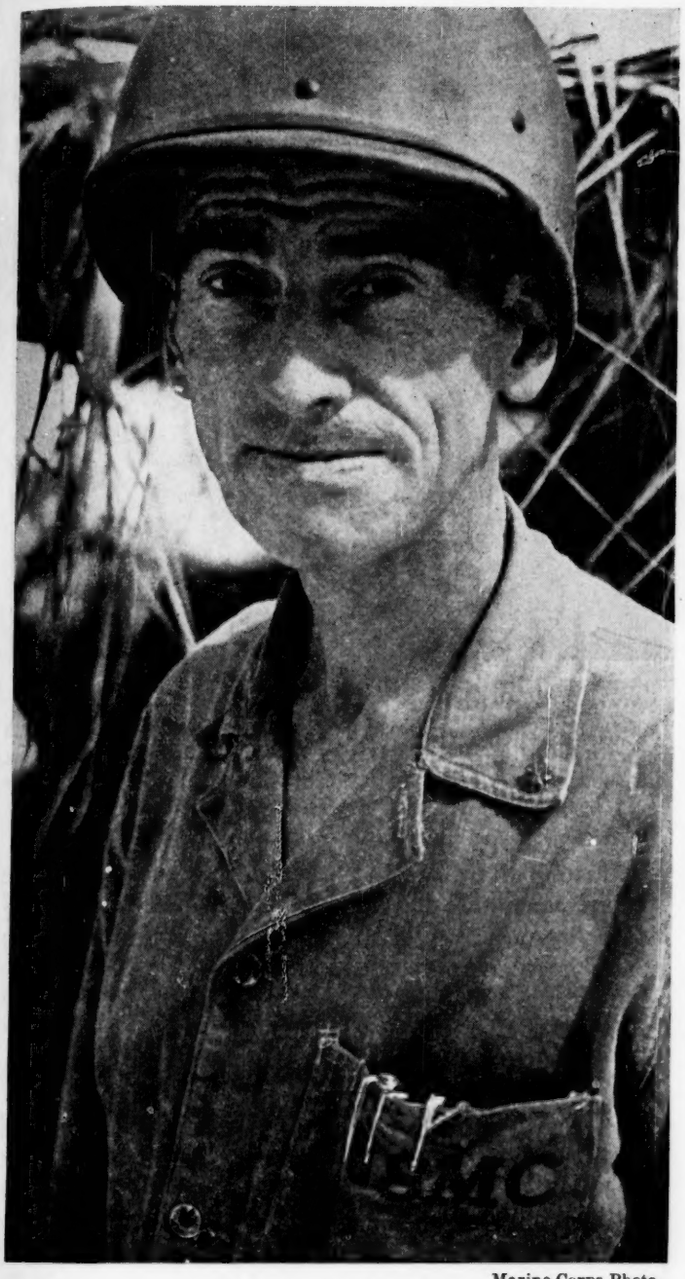
We talked of the last war, of past good times in the States, of politics at home. The colonel recounted experiences with Chinese guerrilla armies, and of how he had foreseen and futilely tried to sound a warning of Japan's sudden attack on the United States. And he told us his own story of his Makin raid, which probably provided a pattern for the recent action.

Here is the tale, substantially as Colonel Carlson told it himself that wet night by the light of a smoky and temperamental kerosene lantern. The story was punctuated by the noises of the jungle that crept close about us.

MAKIN ISLAND is a microscopic dot on the map in the Japanese-held Gilbert group. It is approximately 2500 miles southwest of Honolulu and almost on a direct line to Guadalcanal, in the Solomons, where General Vandegrift and his 1st Division of Marines had made their historic landing on August 7, 1942.

Ten days later the special task unit of several officers and scores of men picked from Carlson's 2d Marine Raider Battalion, and transported by two U. S. submarines, arrived at their destination in the darkness of the early morning of August 17.

Their mission was to land on Makin before dawn, de-



Marine Corps Photo.

MAKIN RAIDER

Lieutenant Colonel Evans F. Carlson, leader of the 1942 Makin Island raid, photographed on the sister island, "Bloody Betio," after the Tarawa invasion.

stroy enemy troops and vital installations and withdraw to the submarines late that same day.

The larger purpose of the mission was to create a diversion and possibly draw off some of the strength Japan was quickly assembling to overwhelm the narrow bridgehead Vandegrift had seized in Guadalcanal.

Beset by unforeseeable difficulties from the start, the bold venture seemed to have ended in disaster, only to succeed ultimately in greater measure than had been hoped for.

Using rubber boats with outboard motors, this small force of Marine raiders was to hit the beach early in the morning. Company "A," less one rifle section, was to land and move rapidly northwest across the island to the main road on the lagoon side. After providing security for its left, or southwest flank, it was to capture the western half of Butaritari Village, including the Burns Philp store. This company was to be responsible for the destruction of vital installations and enemy troops located within its zone of action. It was to pay particular attention to On Chong's Wharf and King's Wharf. After reaching the Burns Philp store it was to establish and maintain liaison with Company "B" on its right, or northeast.

Company "B," less one rifle section, was to land and move rapidly north by east across the island to the main road on the lagoon side. After providing for the security of its right, or northeast flank, it was to capture the eastern half of the main village, exclusive of the Burns Philp store. Within its zone of action it was to accomplish the same things assigned to Company "A," and Company "B" was to pay particular attention to Government Wharf and the Japanese trading station. After reaching the latter, it was to establish and maintain liaison with Company "A" on its left, or southwest flank.

The first priority in these demolitions was to be given to the destruction of radio stations, possibly located at On Chong's Wharf, Government House, and the Japanese trading station.

Both companies were to give as early a priority as practicable to the destruction of seaplanes on the lagoon, using machine gun fire and incendiary ammunition. Each company was to establish a boat guard of not less than one fire group. After landing, the boats were to be concealed in foliage above the beach line. Everyone was instructed to make every effort to avoid injuring any of the natives. As the raiders' countersign, their challenge was to be "Hi Raiders," and the reply was the battle-cry of the battalion, "Gung Ho." Communication with the submarines lying off shore was to be by small portable radios and by blinker lights from an Aldis lamp.

THE ships reached their scheduled debarkation point at the time agreed upon, but from then on unexpected trouble hampered the raiding party constantly. Heavy swells and the necessity for keeping the submarines moving in order to avoid being carried onto the reef made it impossible to assemble the rubber boats alongside for the take-off as had been planned. A strong on-shore wind added to the difficulties of embarking in the boats. Failure of many of the outboard motors to start augmented the difficulty of establishing control. The resulting confusion in the darkness made imperative a quick change of plan for the landing if they were to get in before daylight and have a semblance of control when they landed.

The colonel decided to take both companies to the same beach and pass the word as best he could for all boats to follow him. He headed on a course which would take them to a point generally opposite Government Wharf.

Fifteen of the eighteen boats actually landed here. Two boats landed a mile north, the occupants joining the main force during the fire fight which subsequently developed. One boat containing a lieutenant and eleven men landed over a mile to the south, placing this group in the rear of the enemy when the battle started. Colonel Carlson was without knowledge of this until about 1400. Both companies were badly intermingled on landing. However, they had reached the shore undetected, and there was no cause for alarm. Security was established along the five foot bank

above the shore and under this protection the forces were reorganized. However, while reorganization was in progress, one man accidentally discharged his piece, giving the alarm. The lieutenant commanding Company "A" was immediately directed to move his company across the island, seizing the road on the lagoon side, and report their location with relation to the wharves. The time was 0530 and dawn was beginning to break.

At 0545 this lieutenant reported that his point was at Government Wharf and that he had taken Government House without opposition. He was directed to deploy across the island and advance south on the Japanese trading station. At the same time the captain commanding Company "B" was directed to place his company in reserve and to provide for the security of the left flank.

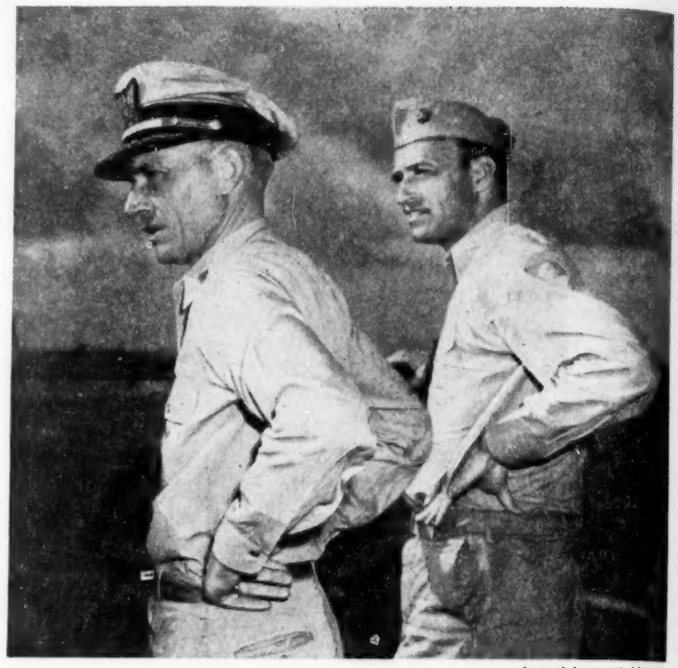
A few minutes later the first platoon of Company "A" made contact with the enemy along the lagoon road near the native hospital. It continued to advance until stopped by an enemy machine gun opposite the right flank. Enemy reinforcements came up by truck but were forced to unload three hundred yards down the road by fire from antitank rifles. By 0630 both the center and left were heavily engaged.

It was reported that the bulk of the Japanese were at On Chong's Wharf while the others were at Ukiangong Point in the vicinity of the lakes. Consequently the submarines were requested to fire on the lake area of Ukiangong in the vicinity of the causeway, hoping to cut off any reinforcements which might move from that direction. This mission was carried out promptly though it was impossible to spot the firing from ashore. Subsequently the submarines were requested to fire on two ships which entered the lagoon from the west. One ship appeared to be a small transport of about 3500 tons. The other was a patrol vessel of about 1000 tons. Both were set on fire and sunk.

By 0700 the pattern of the enemy defense was apparent. It was built around four machine guns, two grenade throwers, automatic rifles and a flame thrower, with infantry supporting the automatic weapons and with a corps of snipers operating from the tops of coconut trees. The snipers and machine guns provided the most effective part of the support. Snipers were cleverly camouflaged and their fire was extremely effective.

Snipers and machine gun fire had taken a heavy toll on the Marines' right flank, and little progress was being made there, so one platoon from Company "B" was directed to enter the line on the left of Company "A." This maneuver was skillfully executed by the lieutenant in charge. By 1130 the line was able to move forward though the snipers continued to be troublesome.

AT this moment the first enemy planes appeared, two Japanese Navy reconnaissance planes arriving to scout the situation. After circling the zone of action for fifteen minutes, they dropped two bombs and flew north. At 1320 a flight of twelve planes arrived. This consisted of two flying boats, four Zero fighters, four reconnaissance bombers and two seaplanes. They continued bombing the Marines for an hour and a quarter. One of the flying boats and one of the seaplanes landed on the lagoon off King's Pier. Both



Coast Guard Photo.

RETURN ENGAGEMENT

Lieutenant Colonel James Roosevelt, USMC (right), with Captain Merlin O'Neil, USCG, on the bridge of a combat transport, part of the column of invasion ships bound for Makin—second visit there for the President's son.

were fired upon by machine guns and an antitank rifle. The seaplane caught fire and burned. The flying boat, evidently hit by the antitank gun, attempted to take off after circling violently several times and crashed into the lagoon. The final air attack on this first day began at 1630 and lasted for half an hour.

The flying boats had brought reinforcements for the enemy. Others were expected to arrive in the next flight. At that time the center of the Americans' line was located in an area thick with foliage which provided an advantage for sniping. They decided to attempt to draw these snipers onto ground more advantageous by pulling back the right and center 200 yards to a line where there was a good field of fire, while leaving the left extended so as to enfilade the advancing snipers. This maneuver was successfully accomplished. The principal gain came during the subsequent bombing at 1630 when the Japanese planes thoroughly bombed the area the Marines had just vacated, inflicting casualties on their own troops.

When this last flight of planes departed at about 1700, the situation was estimated to be as follows:

The mission was to destroy enemy forces and vital installations. This had not yet been accomplished, but the raiders had inflicted heavy damage on enemy troops, and had sunk two planes. The submarines had destroyed two ships. The enemy still appeared to be strong on the front and was in a position to receive reinforcements. The time agreed on for withdrawal to the submarines was 1930–2100 at the latest—and the plan was to raid Little Makin Island the following morning. One of two courses could be adopted: First, continue the attack and make as much progress as possible before withdrawing; by pursuing this course, there would be a chance of taking prisoners and of destroying installations, but the short time remaining meant

that relatively little could be accomplished, and the task of breaking off the engagement would be most difficult. The second course would be to hold the present position and provide for an orderly withdrawal by stages so as to get away at the appointed time. The latter course was decided upon.

At 1840 the Marines' line was shortened by pivoting on their left flank and swinging the right back to Government House. Boat crews went to prepare the boats. At 1900, a covering force having been established closer to the beach, the bulk of the force was withdrawn to the boats. At 1915 the boats began to enter the water. The covering force of one squad, with the colonel, embarked at 1930 after all the other boats had left.

THEN came the heart-breaking part of the whole desperate enterprise. These tough Leathernecks had been fighting a superior force on unfamiliar ground for more than twelve straight hours. The enemy had had the added advantage of air support. The withdrawing forces had to take their wounded with them.

Let Colonel Carlson take up the tale in his own words:

"The hour of 1930 had been selected for the retirement because darkness would have set in and the tide would be high, enabling boats to get over the reef. The surf had given us no trouble when we came in that morning. It did not look tough, not nearly as tough as other surfs we had worked in, though rollers followed each other rapidly. No one was apprehensive of difficulty in getting through the surf.

"However, I had failed to take into account the speed of the waves and the rapid succession in which they followed each other. The following hour provided a struggle so intense and so futile that it will forever remain a ghastly nightmare to those who participated. The experience of those in my own boat was typical.

"We walked the boat out to deep water and commenced paddling. The motor refused to work. The first three or four rollers were easy to pass. Then came the struggle. Paddling rhythmically and forcefully for all we were worth, we would get over one roller, only to be hit and thrown back by the next before we could gain momentum. The boat filled to the gunwales. We bailed. We got out and swam while pulling the boat—to no avail. We jettisoned the motor.

"Subsequently the boat turned over and all our equipment was lost. We righted the rubber craft and continued the battle.

"All this time I thought ours was the only boat having difficulty, for the others had left ahead of us. However, after nearly an hour of struggle, men swam up to our stern and reported that their boat had gone back because the men were exhausted. They intended to rest, then walk the boat up the beach and try another spot.

"I directed that our boat be turned around and returned to the beach, for our men were equally exhausted. On arrival at the beach I found that over half the boats were there and that all the men were completely worn out from their battle with the surf. Most of their gear had been lost. The wounded, of whom there were four stretcher cases and several ambulatory ones, were particularly helpless. I directed that the boats be pulled well up on the beach and that the men rest. Security was established with such arms as could be scraped together. Subsequent attempts to force their way through the surf were made by individual boats at other spots along the beach, but without success.

"At about 2100 a sentry above the beach line was challenged by a Japanese patrol of eight men. He opened fire with his automatic weapon and was fired on from two sides, bullets entering his chest from both directions and seriously, but not mortally, wounding him. Later investigation revealed that he had killed three of the Japanese in the instant before he was shot. This incident showed that enemy resistance was by no means ended.

"Our situation at this point was extremely grave. Our initial retirement had been orderly, but the battle with the surf had disorganized and exhausted us and stripped us of our fighting power. Planes would undoubtedly return at daylight, and it was probable that an enemy landing force would arrive. My plan was to await daylight, move to the north end of the island, and attempt to find sufficient outrigger canoes to take us to the submarines.

"A check showed that of our original complement of officers and men, half of them were still on the beach, and there was no assurance that others had not landed at points farther away. Most of the men had stripped themselves of their clothes and gear, and the fact that it was now raining added to the general misery. This was the low point spiritually of the expedition.

SHORTLY after daylight one group of men requested permission to make another try through the surf. After a terrific battle, they made it. Other groups were then organized and followed. It was useless to send the wounded, especially the stretcher cases, so I directed Major Roosevelt, my executive officer, to return in one of the boats and take charge of our force on the submarines. My duty was to remain until the last man could be evacuated. A total of four boats got through safely before an air raid put an end to this piecemeal evacuation. Seventy men were still left on the beach.

"At this point it is highly fitting to mention the devoted efforts of the officers and men of the submarines to relieve us. We were in communication with both subs by blinker through the night, our radios being useless. Early on the morning of the 18th the ships moved close to the beach, remaining there until enemy planes forced them to dive.

"At 0740 one rubber boat with a motor which was still operating left one of the submarines with five Marines who volunteered to come to our relief. The boat came to a point just outside the reef and shot a line to us. One man swam in with a message from the commander that the subs would remain off the island until we were evacuated. Planes came over and strafed the boat as it headed out to sea. Nothing more was seen of it or its crew. The submarine signaled just before diving that she would return at 1930.

"On the 18th a total of four flights of enemy planes came over between 0920 and 1730. It was evident from their actions that the enemy was confused as to the situation. Heavy bombers bombed the island north of Butaritari, as well as the length of Butaritari itself. Little Makin was

also bombed. The heaviest bombing on Butaritari was in the vicinity of On Chong's and King's Wharves.

"By this time I had learned that the enemy force ashore consisted of only a few men who were widely scattered. I sent patrols out to gather food and to destroy the radio station at On Chong's. A patrol on the north end of the island discovered and shot one Japanese marine. The patrol which went to On Chong's shot another.

"I took a patrol and went over the battlefield of the preceding day, checking our own dead and inspecting the enemy's, searching and collecting equipment with which to arm our own men. The total enemy dead on the field was eighty-three. Opposite our right flank, where the enemy had sought shelter behind coconut palms, our machine gun armor-piercing bullets had passed through the bodies of the trees killing the men on the opposite side. Thirty enemy dead lay here on the lagoon side of the road.

"To the east Jap machine guns were surrounded by their dead crews, killed by our grenades and riflemen. Our own dead on this northern front numbered eleven, including my intelligence officer, who had been on the right flank looking for me. Our other three men killed in action were members of the boat crew which landed behind the enemy lines to the south.

"It is necessary to mention here the part taken in the action by this lieutenant and his eleven men. I was without knowledge of their whereabouts until about 1400 on the 17th when one of the men joined our main force, having penetrated through the lines. The lieutenant found himself east and south of the Japanese trading station after landing. (He had missed the rest of the boats after leaving the submarines and headed for shore, the current carrying him to the south.) Fighting began to the north as he landed. He moved inland and then turned north.

"When near the trading station he immediately engaged troops along the lagoon side of the road, killing eight of them. Three of his own men were killed. During the balance of the day he continued to harass the enemy's rear, searched houses, destroyed a small radio station, picked off messengers and burned a truck. At 1930 he reëmbarked and, after a difficult struggle with the surf, succeeded in regaining one of the submarines. The presence of mind, judgment, skill, courage, and devotion to duty displayed by this young officer, who was under fire for the first time, were outstanding.

FOOD in the form of canned meats, fish, and biscuit had been found at the Japanese trading station. During the afternoon of the 18th I had moved our force back to the vicinity of Government House, where water and cover were available and where the form of an old defense position provided added protection. Patrols were operated from here. It was decided to evacuate the remainder of our force at 1930 by way of the lagoon and the south lagoon entrance.

"A small sloop with an auxiliary motor was anchored off the Japanese trading station. A lieutenant and two men, one possessing experience with marine engines, volunteered to row out to the sloop and explore the possibility of using her for the evacuation. At the time, 1700, I had a patrol in the vicinity of the trading station engaged in destroying enemy stores. We covered the approach to the sloop.

"As the boat arrived alongside, shots were heard. The party boarded but departed a few minutes later. On his return the lieutenant reported that when they arrived alongside this sloop he was fired at by a pistol thrust through a porthole, the bullet going wild. A hand grenade was tossed through the porthole, and after they boarded, they finished off the Japanese marine who was guarding the sloop. As the vessel was half full of water and in a dilapidated condition, it was unusable.

"The patrol I took to the south later in the afternoon was for the purpose of accomplishing what destruction of stores was possible in the time remaining. The most important job proved to be a quantity of aviation gasoline estimated to aggregate from 700 to 1000 barrels. This was fired by shooting into the barrels and using TNT for ignition.

"Our eventual evacuation from the island was executed from the lagoon side by carrying four boats (all of ours which remained serviceable) across from the seaside. We found one outrigger, thus affording space for our seventy men, including the wounded on stretchers.

"All five boats were lashed abeam of each other. Two boats had motors although only one worked throughout. With what few souvenirs of the battle our limited space could accommodate, we set off across the lagoon at 2030.

"The passage was distressingly slow, but there was no surf to interfere. Ashore, the only indication of life came from the billowing flames of the gasoline fire. Off Flink Point we flashed a signal and received an immediate response from one of the submarines. At 2300 we arrived alongside.

"Our experience on the night of August 17 emphasized a truth that is as old as the military profession: no matter how bad your own situation may appear to be, there is always the possibility that the situation of the enemy is much worse. The coöperation and support given us by the officers and men of the two submarines were magnificent. A harmony of spirit and of unremitting self-sacrifice reigned throughout the expedition.

"As for the officers and men of my task unit, their action and attitude left nothing to be desired. During the fighting at Makin, units were frequently intermingled, yet each individual displayed initiative, resourcefulness, and a willingness to work effectively in whatever team he found himself. None had been under fire before, but there was no hesitation about closing with the enemy. In fact, most of our casualties came from careless exposure to enemy fire in order to 'take out' the opposition. There were countless examples of extraordinary heroism."

The first Makin raid was one hundred per cent successful. When the Marines sailed away they had destroyed everything there, including all enemy troops. The attack may have diverted considerable Japanese naval strength from the Guadalcanal area.

But it was the tragedy of the rubber boats in the surf the night of August 17, which seemed at the moment to have doomed these hardy raiders to annihilation, that kept them there to complete their entire mission the next day before their safe withdrawal.

Japanese Small Arms

By Captain Melvin M. Johnson, Jr., USMCR (Inactive)

IN a previous article* information was given about the Japanese Rahambu light machine gun, with the idea of familiarizing American troops with this weapon so that they might turn it against the enemy whenever opportunity offers. This article is intended to deal similarly with other Japanese small arms.

Sufficient information is included in these notes to familiarize the reader who understands automatic weapons with the Japanese rifle, light and heavy machine guns, and pistol. A brief description of how to load, fire, and field strip these weapons is included, together with some information on Japanese ammunition for small arms.

The Arisaka Rifle

NAME and designation: JAPANESE ARISAKA RIFLE, BOLT ACTION, Cal. 6.5mm., "38TH YEAR" OR M1905.

Nation of origin and source: Based on Mauser action, magazine, and clip. Minor modifications probably made by Japanese armory.

Weight, empty, approx.: 8.75 pounds. (Carbine about 7.8 lbs.)

Length overall: 51 inches. (Carbine 38 in.)

Length with bayonet: 65.5 inches.

Length of barrel: 31.3 inches. (Carbine 18 in.)

Magazine capacity: 5 rounds (plus one in chamber).

Loading means and how accomplished: Typical Mauser or M1903 with charger.

Sights: V-notch and barleycorn, similar to Mauser. No windage. Elevation from 400 to 2,400 meters.

Ammunition used: 6.5mm. or .256 inch semi-rimless.

Weight of bullet: 139 grains, pointed bullet.

Muzzle velocity: 2,500 foot seconds.

Chamber pressure: Probably 35,000 lbs. per sq. inch.

Extreme range, max. elevation: Probably 2,500-2,800 yards.

Effective combat range: About 500-600 yards. (In Japanese hands 100-300 yards is more realistic.)

Notes on operation: The operation is similar to that of the parent Mauser, or U. S. M1903. The bolt handle is at right angles. The breech is covered by a sliding dirt and dust cover which operates with the bolt. This is removed from sniper models.

Open the bolt and insert rounds as with M1903.

SAFETY: Rifle must be cocked as with all Mausers to set the safety. The cylindrical cap on the end of the bolt is pressed forward and turned to the right.

Notes on stripping: Same as Mauser. Pull bolt out while pulling open latch on left side of receiver. A latch in the trigger guard releases the follower and floor plate.

Bayonet: The bayonet weighs one pound. The blade is 14 inches long. The Japanese are alleged to favor the bayonet. Japs are notoriously poor rifle shots.

Comments: It is understood the Japs may be changing to 7.7mm. which is a British .303 copy, or possibly to German 7.92mm. which the Chinese use. It is doubtful whether a change in the Arisaka rifle ammunition can be extensively attempted at this time. The Japanese captured some quantities of small arms ammunition and an arsenal making .303. Some Jap aircraft guns use the 7.7mm. (.303), including a modified Lewis.

The average Jap is small and not built to take too much recoil. The 6.5mm. is quite light in this respect. The prevalent impression that the 6.5mm. is a "sissy" cartridge is not correct. A pointed 139 grain bullet of .262 inches diameter at 2,500 foot seconds is in itself not such a bad load. Moreover, with the long 30-inch barrel there is virtually no flash.

Possibly the Japs have used poor powder and lost velocity thereby. Norwegian riflemen with almost the same type of cartridge killed Germans at 600 yards with Krags in 1940. Poor workmanship and poor marksmanship are undoubtedly the final answer. Moreover, Jap forces depend chiefly on the light machine gun for fire-power. The so-called Jap snipers are reported not as effective by their bullets as by their presence. Relying on cover in the jungle they rarely shoot beyond 50-100 yards.

Americans troops would never earn extra pay for qualification if they had to use the Arisaka.

Some Arisakas have no breech cover and include a folding wire monopod on which the forearm may be rested for steadying the aim.

The Nambu LMG

TYPE and Caliber: JAPANESE NAMBU. LIGHT MACHINE GUN, (or machine rifle).

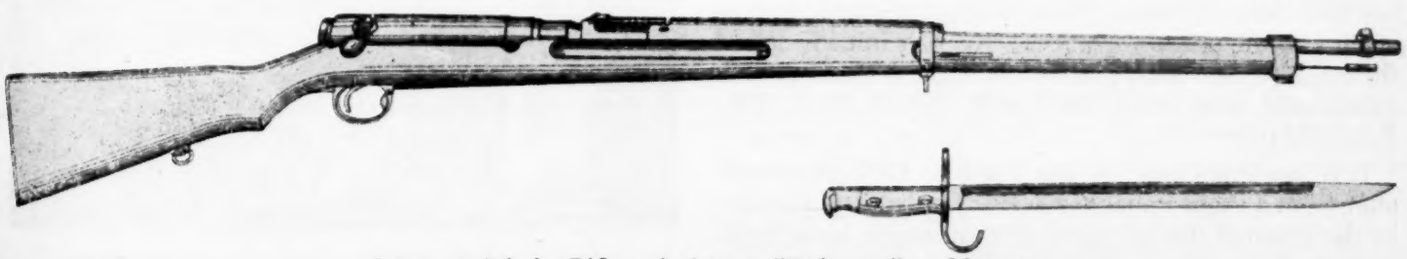
Name and designation: Cal. 6.5mm., M1922.

Date of adoption or issue, approx.: 1922. Now being replaced by Type 96.

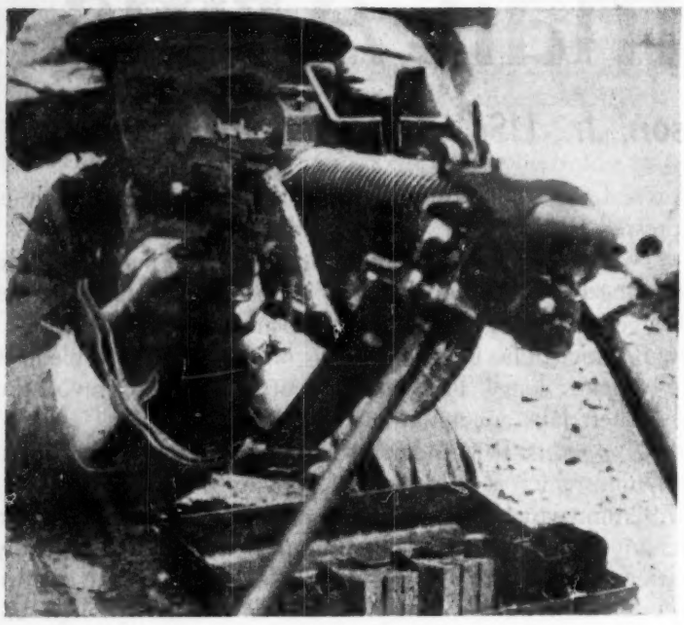
Nation of origin and source: Modified from Hotchkiss, Jap heavy M92.

Weight, empty, approx.: 22.5 lbs.

*See The Marine Corps Gazette, January, 1944, pp. 43 ff.



Japanese Arisaka Rifle, cal. 6.5mm. "38th year" or M1905.



Japanese Nambu LMG, 6.5mm. M1922.

Weight, with mount: 24 lbs.
Length overall: 43.5 inches.
Length of barrel: 19 inches.
Magazine or feed capacity: 30 rounds.
Location of feed: On left of receiver.
Loading and feeding means and how accomplished: Insertion of six 5-shot clips placed horizontally in six vertical rows inside a vertical hopper. Rounds are pressed down by the follower, stripped and fed across into the bolt path by a feed rack, actuated by the moving parts.
Cyclic and deliverable rates of fire: 500 RPM cyclic. 150 RPM deliverable.
How fired, how cocked: Automatic only; action cocked open.
Sights: Post front and open notch rear sight, adjustable from 300 to 1,600 yards.
Ammunition used: Japanese 6.5mm. Same as Arisaka.
Effective combat range: 300-600 yards.
Description of method of automatic operation: The Nambu is of the gas-operated type, similar to the Hotchkiss. Cocked open, the breech block and slide move forward, feeding, locking, and firing. On the backward stroke the gases hit the piston, driving the slide rearward, disengaging the lock, and opening the action. The feed rack is actuated by the breech block, having both a lateral and vertical motion which permits stripping rounds from the clips and moving the rounds into the feed-way.

A peculiar feature of the Nambu (as well as the heavy Jap Hotchkiss and the Italian Breda) is the necessity for an oil pump to lubricate the cartridges and prevent extraction trouble. This is said to be due to the fact the Nambu does not have "slow extraction." This means a relatively gradual application of primary extracting force to initially loosen the cartridge case. Such gradual movement is found in such gas-operated weapons as the B.A.R. M1918, Bren, Z.B., French M1929.

It is significant that the Jap Type 96 LMG has no oil pump, but a slight initial extraction retardation is provided by the action of that gas-operated weapon due to the angle of the lock shoulder.

If, in a gas-operated weapon, the slide moves at very high speed, cams the lock, and abruptly slams the breech block rearward, a terrific yank on the rim of the shell naturally results, which, if the case is sticky usually causes difficulty. But, if during the first motion of camming the lock the breech block is forced rearward slightly, this gives a slower initial extraction movement, the case being loosened slightly before the severe opening motion takes place.

Notes on operation: To load—raise the hopper follower, and insert six 5-shot clips, Arisaka rifle type. Lower the follower. Grasp cocking handle on left side of receiver and pull to rear. The weapon is ready to fire when the trigger is pulled. The hopper can be loaded selectively during a cessation of fire by replacing clips.

Notes on stripping: To field strip—turn backplate pin down vertically, pull it out, and pull off backplate and driving spring. Pull the bolt slide rearward and remove operating shaft, bolt, and locks. Line up lugs on bolt slide with openings on side of receiver rearward and pull feed housing out to the left. Press down oiler lock and slide oiler off to left. Drift out trigger group pin to left. Pull off trigger group.

Comments: The Nambu is being replaced by the Type 96. The Nambu has many similar features showing that the Type 96 was modeled after the Nambu. Thus the barrel radiating rings, cylinder and sight mounting, cocking handle, backplate, trigger, ejector, etc. are similar.

The Nambu feed is unique and most ingenious. For practical purposes it probably requires more careful machining and more operations than the more conventional Type 96, and is more likely to get out of order.

The closer our forces get to Japan in World War II the more Nambus they will encounter. Japan probably had a lot of them and will need this weapon as a sub-standard.

The Japanese Hotchkiss Heavy Machine Gun, Cal. 7.7mm., Model 92

THIS 62-pound tripod-mounted, strip-fed weapon is modified from the French Hotchkiss, but like the Jap Nambu LMG, requires an oiler to lubricate the cartridges.

Stripping is similar to the Nambu. The M92 has the

Japanese Hotchkiss Heavy MG, cal. 7.7mm. M92.

Japanese model of 1925 Nambu automatic pistol.

Same, line drawing.

same backplate pin, and backplate. The procedure for removing the bolt and slide is identical with the Nambu.

To remove the oiler, push oil reservoir lock forward, raising up rear of reservoir, remove screw, and lift out the reservoir.

The barrel is removed by taking off gas jet cover from bottom of cylinder and unscrewing gas jet from barrel. Remove barrel nut. Turn barrel half-turn to right and pull it out. Pull off barrel sleeve.

The feed mechanism is removed by rotating the retaining pin on the front bottom of the feed unit one half turn down and out. Pull off holding pawl and holding pawl spring. Line up marks on feed slide with marks on feed unit, and drift feed slide pin out to front of feed unit. Slide the feed slide to the left, removing pawl and spring.

The gas-operated M92 weighs 62 pounds, tripod mount 55 pounds. Length overall is 45 inches, length of barrel 29 inches. The cal. 7.7mm. is identical with British .303 rim-type. Cyclic rate is 450 RPM, deliverable rate about 250 RPM. Sight elevates from 300 to 3,000 yards.

The gun loads with 30-round cardboard strips from the left, cartridges on top as fed.

To load: pull cocking handle fully rearward till engaged by holding pawl. Feed in the strip which will then depress pawl, move strip over putting first round in feedway and stop bolt on the sear. Pressing the trigger releases the bolt which goes through a cycle almost identical with the Nambu.

Be sure plenty of oil is getting onto the cartridges.

Although the Japanese have delivered many very deadly barrages with the M92 it is decidedly not a first class heavy machine gun, and cannot be compared with the Browning or Vickers, or M1917 French Hotchkiss.

The Model of 1925 Nambu Automatic Pistol

THIS weapon is copied somewhat after the German Luger Parabellum in appearance. The short-recoil action differs from the Luger, but its general loading and firing operations are similar. The locking bolt swings up and down to disengage the barrel and slide.

This pistol weighs 1.98 pounds and is issued in two calibers: 8mm. with eight-round capacity magazine for noncoms, and 7mm. with seven-round capacity magazine issued to officers.

The ammunition is of the rimless bottle-neck type and resembles Luger ammunition. The 8mm. bullet weighs 102 grains and is of hardened lead, not jacketed. The muzzle velocity is approximately 950 feet per second.

In both types of pistol the grip safety is found on the handle in front of the grip and just below the trigger guard. The rear sight is adjustable for range. There are two forms of holster issued, one a heavy leather of ordinary type, and the other so arranged that the pistol can be attached to it so as to form a shoulder stock. The latter is made long enough to carry the pistol, and has a telescoping section which can be pulled out far enough to make the length correct for use as the stock.

Some Japanese cavalry units carry a Smith and Wesson type revolver made in Japan. This revolver is also issued to certain home guard and police forces.

The magazine for loading and firing would be prepared in the same manner as with conventional pistols. The magazine is inserted into the handle so that it is fully home. The slide is grasped at the rear and pulled fully backward, and released, to prepare the pistol for the first shot. As with all automatic pistols this one will continue firing one shot for each function of the trigger until the pistol is empty when the magazine is withdrawn and a fully loaded one replaced. The breech probably remains open when the magazine is empty.

Japanese 7.7mm. Ammunition

RECENTLY the Japanese are issuing 7.7mm. ammunition similar generally to the British .303, *but* with serious and most important exceptions, in that there are three kinds, *rim, semi-rim,* and *rimless.*

Personnel attempting to use Jap 7.7 ammunition should note especially the *semi-rim* and *rimless* because only the latter will function in the new Jap Arisaka rifle and new Type 99 LMG. Both weapons are similar to the earlier Arisaka and Type 96, but fire rimless type 7.7mm. 184 grain ammunition. The Jap heavy Hotchkiss machine gun fires the semi-rimless 7.7mm., having a 205 grain boat tail bullet at 2,200 foot seconds.

WARNING: The heavy Hotchkiss semi-rim 7.7mm. will *NOT* function in the type 99 gun, or in the Arisaka. The rimless type will *not* function in the heavy Hotchkiss. The *aircraft type* 7.7mm. *rim* ammunition which is actually identical with the British .303 will *NOT* function in the Type 99 or Type 92 heavy machine gun, or Arisaka.

(Continued on page 24)

"BEACH BRICKS" AT WORK

How the British Organize Beachheads

By Captain W. R. Sendall, of the Royal Marines

ONCE an Allied invading force has gained a footing on a hostile coast possibly the biggest single problem, until a properly equipped port has been captured and put into working order, is supply of the fighting troops through the beaches.

Food, water and ammunition for the troops of Britain and the United States, spare parts for tanks, vehicles, and aircraft, replacements for every kind of weapon from tommy-guns to 25-pounders, all have to be handled across the open beach, which is seldom ideal for such a purpose even when wind and weather are favorable. The task requires the complete coördination of many separate services ashore, and the coöperation of the whole with the Royal Navy.

In addition, the beach area must be protected from air attack and from sabotage by enemy ground troops who may have been passed over in the initial assault or else infiltrated through the forward troops. Every man must be prepared to down tools and fight in an emergency, for in the early days there can be little depth to the defensive dispositions of the forward units. The experience of Salerno shows how real is this aspect of their responsibilities.

Wounded and prisoners from the fighting area also have to pass through the beachhead for evacuation. Beach roads must be laid, existing roads improved, and a carefully thought-out system of traffic control devised and enforced to prevent the whole operation falling into confusion.

The organization which has been created by the British to cope with the whole of this complicated problem is the "Beach Brick."

The nucleus of a "Brick" is an infantry formation. To this are added detachments from the several specialist services who will be required to function on the beach. These include Royal Army Service Corps, who are responsible for food and water, ammunition, gasoline and lubricants; Ordnance, whose business is weapons and equipment of all sorts; Engineers to deal with roads, minefields, and beach improvement of every kind; R.E.M.E., who keep the wheels of vehicles turning and the weapons firing; and Medical Services.

The needs of the Royal Air Force have to be represented and, of course, the Royal Navy. Signals play an important part, for in the beach area the signal systems of navy and army must effect a junction. Provision has also to be made for antiaircraft defense. The organization is flexible, in the sense that specialist components can be added or taken away according to the needs of the particular situation.

The advance parties of the "Brick" land hard on the heels of the first assault and work must begin immediately, increasing in scale and scope as larger formations of troops get ashore and into the battle. The "Brick" must be prepared to maintain supply through the beach for a period up to two months, though in practice the period may be much shorter if a good and comparatively undamaged port can be captured early in the operation, as was the case in Sicily.

Problems of beach maintenance have always received a great deal of attention from the Royal Marines. Thus it was not unnatural that the first battalion in the Middle East to undertake the rôle of "Brick nucleus" was a Royal Marine battalion. As soon as it was trained in the rôle, a small team of Marines toured other training establishments to demonstrate to newly forming "Bricks" and assist in their training.

Eventually this "Brick" followed up the assault at Marzameme, on the east of the Pachino Peninsula in Sicily, as part of the Eighth Army. For eight days it operated on the beaches here until the capture of ports rendered its services unnecessary. Then, shorn of its specialist accretions, it became an infantry unit once more and joined in the river fighting during the advance on Catania.

Japanese Small Arms

(Continued from page 23)

In the rimless 7.7mm. for which the Type 99 and new Arisaka are chambered the flat base bullet weighs 184 grains, the muzzle velocity is 2,300 foot seconds. Both this and the 205 grain boat tail load for the Hotchkiss are extremely effective and powerful loads with excellent ballistics.

The Japs have certainly achieved a complicated supply problem with their old-type 6.5mm. semi-rimless, .303 or 7.7mm. *rim* for aircraft, *semi-rim* for the heavy Hotchkiss, and *rimless* for the rifle and Type 99 LMG.

All Jap 6.5mm. ammunition shoots in any Jap 6.5mm. gun. None of the 7.7mm. types can be fired interchangeably.

In the type 99 and 7.7 Arisaka armed squad, all 7.7mm. should be rimless. You can feel the Hotchkiss semi-rimless with the fingers. The rimless case is smooth.

A landing in Sicily. Like American Marines, the British make their assault from landing craft, and then unload weapons, ammunition and supplies.

Immediately after landing, Marines and pioneers begin to make a road for heavy equipment.

"BEACH BRICKS" *at Work*

All photos, British Official Photo.

A loud speaker is erected for the direction of operations.

Supply operations are in full swing even before the skeleton beach defenses of barbed wire have been torn down.

Field Operation Instruction, Radio School.

Signal Training at New River

By Captain F. D. McClelland, USMCR

THE Signal Battalion at Camp Lejeune, New River, N. C., conducts one of the most interesting and varied training programs to be found anywhere in the Marine Corps. The camp itself is ideally situated for signal training. Lying along the North Carolina seacoast and around the New River estuary, its extensive area provides a wide variety of terrain for training purposes—beaches, dunes, swamps, ravines, inlets, dense undergrowth, and large wooded areas—similar to those to be found on many of the world's war fronts today.

The Signal Battalion with its schools is located near the center of the camp, its buildings lining both sides of Holcomb Boulevard which, flanked by concrete walks and wide grassy areas, stretches through the main part of the camp and terminates at the Camp Headquarters on the edge of the bay. In this central area the battalion is quartered in substantial brick barracks accommodating 400 men each, and is fed in three large mess halls, each of which is capable of serving at one time approximately 1,000 men. Within the battalion area are a dispensary, post exchange, barber shop, and theater, and nearby are chapels, post office, bank, hostess house, recreation building, athletic fields, tennis courts, laundry, and tailor shop.

All these conveniences, however, do not mean that the program of the Signal Battalion is an easy one. On the contrary, the day's schedule is long and hard, beginning with first call at 0550, with classes and field work continuing without let-up, except for short breaks, until late in the afternoon. And all this is an addition to the many other duties that fall to the lot of Marines everywhere. We should not overlook, either, the detachment of students at Onslow Beach, about ten miles from the main camp, who live in patched-up summer cottages, carry their own drinking and washing water, and do without most of the conveniences just mentioned.

Before we make a survey of the various schools and courses that make up the communication training program at Camp Lejeune, let us note briefly something of the background of the Signal Battalion.* The communication schools had their modern origin in the 1st Signal Company, organized at the Marine Barracks, Quantico, Va., in 1931. Although the function of this company was to furnish instruction in all branches of communications, the formal

*See "Marine Corps Signal Training," in September issue, and "The Signal Schools at San Diego," in October issue of THE MARINE CORPS GAZETTE.

schooling for several years consisted mainly in the training of radio operators, and this was largely supplemented by additional training at the Naval Radio Operators' School at Norfolk, Va.

Due to the small number of men involved, telephone training remained chiefly on an individual basis until the Field Telephone Course was established in 1940. In the earlier years, selected men were sent to the Army's Signal Corps School at Fort Monmouth, N. J., for advanced training in telephony. This practice was discontinued, and the Telephone Electricians' Course was established, in 1935.

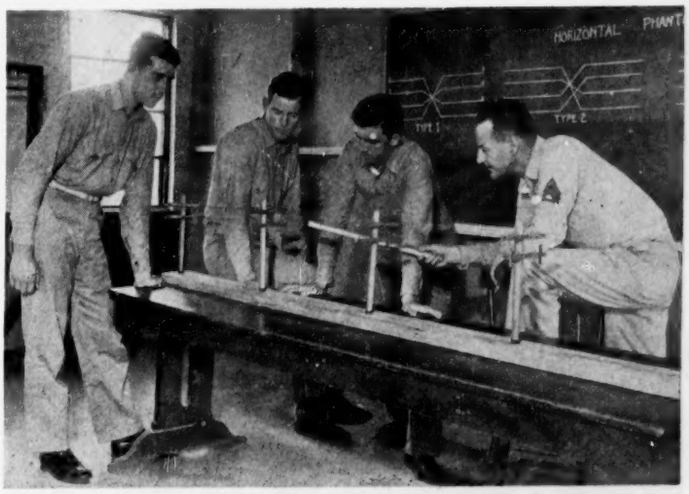
The communication schools at Camp Lejeune grew up almost overnight, when they were transferred there bodily from their overcrowded quarters at Quantico in October and November, 1942. Under the direction of Lieutenant Colonel R. L. Peterson, battalion commander, whole schools—students, instructors, equipment, everything but the classrooms themselves—were moved intact to New River. All this was done with remarkably little interruption of training, since classes were resumed almost immediately upon arrival at their new quarters.

So the communication schools at Camp Lejeune not only began under circumstances requiring speedy adjustment to a new environment, but have continued in process of adjustment ever since—adjustment to the rapidly increasing need for trained communicators in all fields, and to continuous modifications of the types of training required. Under the leadership of Lieutenant Colonel George C. Ruffin, Jr., present battalion commander, the training program has been developed to meet in a practical and effective manner the varied communication needs of an expanded Marine Corps. This has been done in the face of the limitations of time, personnel, and materials that are always to be expected under the pressure of wartime expansion.

MOST of the men assigned to communications training at Camp Lejeune come directly from the Recruit Depots at Parris Island and San Diego, upon the completion of their recruit training, and have had little or no training in this field. In addition to these, there are a few men of longer service who at their own request are assigned to the Communication Schools, and a limited number of experienced communication men who have been returned for further training.

Recruits are selected by the classification officers so far as possible upon their qualifications for communications training. These include intelligence, mechanical aptitude, code aptitude, education, vocational experience, and preference for communications duty. The intelligence and aptitude of each recruit are measured through suitable tests at the recruit depots, and the remaining qualifications are determined by the classification staff through personal interviews.

Class in Cable Splicing, Telephone School.



Demonstration of Pole Line Construction Practices, Telephone School.

Since most communication training is highly technical, students should be average or better in intelligence and mechanical aptitude, and should possess a high school education or the equivalent. If possible, they should have had previous electrical or mechanical experience, and should have a preference for communication duty. Reasonable code aptitude is necessary for radio operators, and men with radio experience, particularly "hams," are especially desirable for such training. Because of the arduous labor involved, students assigned to the Field Telephone Course should be above average in physique.

As might be expected, men with complete qualifications for communications training are not available at the recruit depots in sufficient numbers to fill the required quotas. As a rule even those men who are otherwise well qualified, are anxious for combat service, and do not relish the idea of going to school for specialist training, although the fact is that, due to the demand for communication personnel, men so trained often reach combat zones before those assigned to general duty. It is the task of the instructors, particularly during the first few weeks of each course, to point out the opportunities and importance of communications training, and to stimulate, by means of their own skill and enthusiasm, the desire of their students to master the work assigned. This they are doing in a most creditable manner.

The main objective of the training program—and a difficult one—is to prepare adequately trained communication personnel, in numbers to meet the estimated needs, in the shortest possible time. The keynote of the program is "practical training." While theory must be included in order that the men may function intelligently as communicators, the emphasis is placed continually on the practical application of that knowledge to actual use in warfare. For this reason a considerable portion of each course is devoted to

Operation of Field Telephone Switchboard, Telephone School.

field exercises in which full advantage is taken of the excellent facilities afforded by the various types of terrain in the Camp Lejeune area.

Much of the effectiveness of the training program is due to the efficient supervising officers, and to the capable noncommissioned officers who serve as instructors. Many of them are men recently returned from battle zones where they had communications experience in actual combat. Having been thoroughly schooled in communications before their combat experience, they possess an excellent combination of both theoretical and practical knowledge. Of course, not all communication personnel returned from combat are suitable for duty as instructors. Only those are assigned to the communications schools who after careful selection and trial prove to be competent instructors. Needless to say, the services of these men add authority and realism to the training, and the practical information they are able to pass on to their students is extremely valuable.

The organization of the training program in the Signal Battalion includes the Electronic, Radio, and Telephone Schools, covering a total of fifteen different courses. Each course not only consists of training on the particular types of equipment with which it is concerned, but covers also the instruction necessary for properly trained communication personnel in such fields as Marine Corps organization, Naval procedure, map reading, message center operation, semaphore, physical conditioning, and the like. Although each graduate will receive his final training when he is assigned to his combat unit, every effort is made to provide him with the requisite knowledge and practical skills which will enable him to adjust quickly and satisfactorily to communication duty in his organization.

In all the schools careful attention is given to the progress and personal adjustments of each student, and effort is made to utilize all men assigned to communications training. Those who lag for lack of previous preparation or experience are retained for additional instruction in the elementary subjects, while superior students are moved on to more advanced classes. Men who are inapt in one field are often found to be capable in another field of communications. Throughout the program, instruction is individualized as much as possible, particularly in the field training.

Electronic School

THE most rapid development in the Signal Battalion schools has been in the field of electronics. Courses in this field have increased from one in 1941 to ten at the present time, including courses for operators, technicians, and power van attendants. The continuous evolution of new types of equipment presents an unceasing problem in matériel and in the training of instructor personnel. The care and maintenance of equipment is in itself a serious responsibility, involving the security of millions of dollars worth of delicate apparatus.

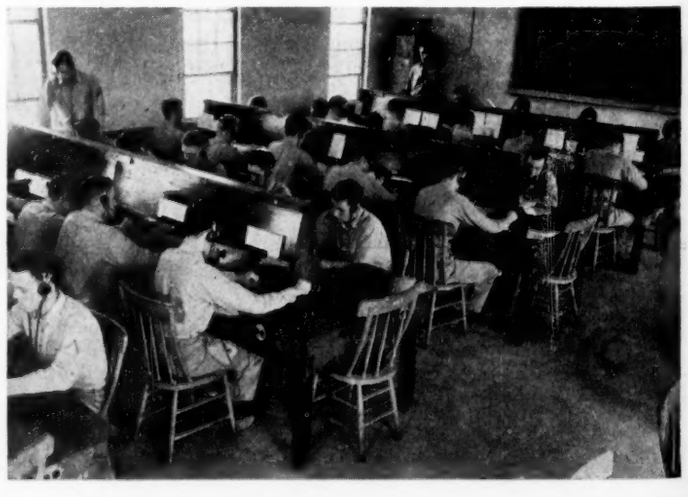
In the Electronic School, in charge of Major David A. Tripp, four courses are conducted for technicians, one for power van attendants, and five for operators. In each of the technicians' courses the first four weeks are devoted to a study of the elements of electricity and the second four weeks to the elements of electronics. The remaining weeks of each course consist of instruction on the particular types of equipment with which the course is concerned. Students are assigned to the Electronic School from the recruit depots at Parris Island and San Diego.

Electronics training is carried on in three camp areas—the central battalion area where most of the class and laboratory work is conducted, a field area about three miles distant, where a number of sets are located, and Onslow Beach, about ten miles from the central camp.

Radio School

THE Radio School, in charge of First Lieutenant Cyril D. Jeffcoat, conducts three courses, the Radio Operators' Course of fifteen weeks, the Signal Drafting Course of six weeks, and the High Speed Radio Operators' Course, which runs continuously and qualifies graduates in from four to twelve weeks.

Students are assigned to the Radio Operators' Course directly upon completion of their recruit training at Parris Island. The purpose of the course is primarily to train field radio operators. The first nine weeks are spent in classroom and laboratory instruction, the last six weeks in field training, the final three weeks of which consist of night exercises in radio communication. Classroom work consists of in-



Practice in Net Operation, Radio School.

struction in elementary electricity, elementary radio, Marine Corps radio field sets, naval procedure, and code receiving and sending. Instruction in code is begun the first week and is continued throughout the course. In order to accustom men to operating under battle conditions, ten minutes of each hour is accompanied by realistic battle sounds, produced by an amplifying system and special records prepared for that purpose.

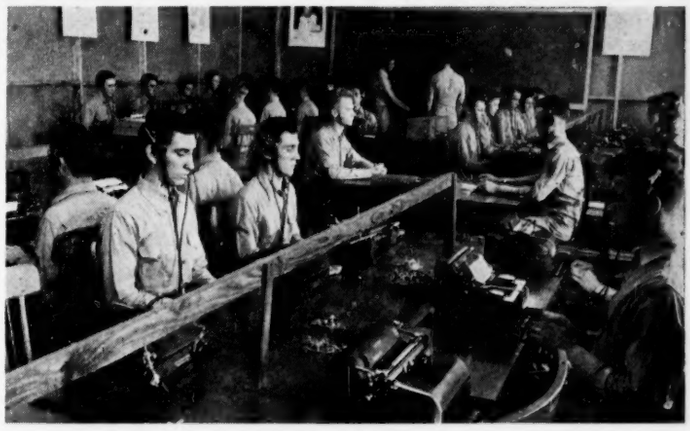
Preliminary class work in basic naval procedure is followed by three weeks of daily drill in operating procedure, conducted at tables equipped with headphones and hand keys. The group of men at each table operate as a radio net, under the direction of an instructor who listens in and supervises the procedure whenever necessary.

Code practice is continued throughout the six weeks of field training, the students spending one and a half hours in the code room each morning before hiking to the field. The first three weeks are spent in daylight field exercises in a wooded area some distance from the school. Here the students set up and operate field radio nets, and become thoroughly familiar with the use of Marine Corps radio equipment under field conditions. Combat situations are simulated, and attention is given to the proper location and concealment of sets. As part of their physical conditioning, field classes each morning go over an obstacle course carrying their radio equipment on their way to the field area, and at the close of each day's exercises double-time two miles back to the camp.

However, the most strenuous application of the knowledge gained throughout the course comes in the last three weeks. During this period the men spend each night from 2000 to 0600 operating in a densely wooded area under arranged conditions of heavy radio interference. Here they encounter situations similar to those found in actual combat, and they develop skill in the handling of their equipment under difficult circumstances. During the latter part of the course each class participates in landing exercises in a two-day problem involving the use of aircraft and other means for simulating battle conditions. The ability of the men to perform under such rigorous training is in itself an indication of the thoroughness of the course.

The High Speed Radio Operators' Course enrolls certain of the most capable graduates of the Radio Operators' Course who have had training as typists. The purpose of the course is to prepare men for advanced radio operators' schools or for duty at high speed base radio stations. Students remain in the class until they qualify, which usually requires from four to twelve weeks. In addition to training as high speed operators with the typewriter, they are required also to have a knowledge of all mobile radio equipment, to be able to make minor repairs and adjustments on field equipment, and to handle all types of radio test equipment used by troops in the field. In order to qualify for graduation from the course a student must be able to type forty-five words per minute, to receive a minimum of thirty words per minute on the typewriter, and to send twenty-five words per minute.

The Signal Draftsman Course is six weeks in length and enrolls selected graduates of either the Field Telephone Course or the Radio Operators' Course. The work of the first three weeks deals with electrical drafting, and includes



High Speed Circuit Instruction, Radio School.

the elements of mechanical drawing, radio circuit diagrams, and telephone wiring diagrams. The work of the second three weeks is concerned with topographical drafting, and includes sketching from aerial photographs, correction of topographical maps by use of aerial photographs, contours and planimetry from photographs, ground form line problems, and line route maps.

The course is designed to train signal draftsmen in the rapid preparation of circuit diagrams and line route maps under field conditions. Graduates are prepared for duty as signal draftsmen in a divisional signal company or a corps signal battalion.

The work of the Radio School is supplemented by a Radio Repair Shop under the supervision of the battalion quartermaster. This shop is manned by expert radio technicians, and is responsible for the care and maintenance of all radio equipment within the Signal Battalion.

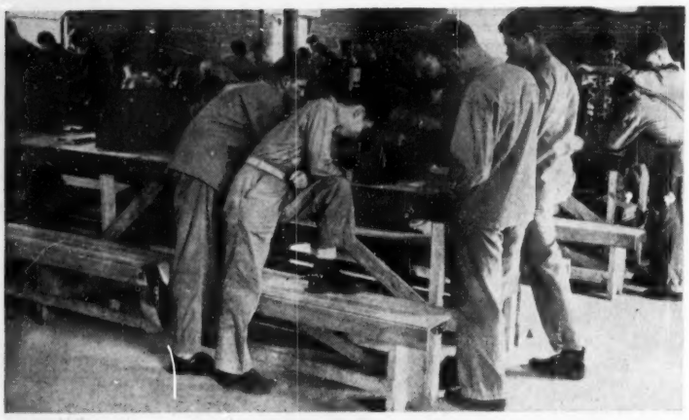
Telephone School

THE Telephone School, directed by First Lieutenant John H. McGuire, conducts two courses, the Field Telephone Course of eight weeks, headed by Marine Gunner Clifford K. Dillow, and the Telephone Electricians' Course of twenty weeks, headed by Second Lieutenant G. A. Barrett.

The purpose of the Field Telephone Course is to prepare men for duty as members of field wire crews. Students are assigned to this course directly from the Recruit Depot at Parris Island. A new class is entered every two weeks, so that four classes are continuously in various stages of training.

The first four weeks of the course are devoted chiefly to classroom and laboratory instruction. Classes are taught in Marine Corps organization, semaphore, message center operation, map reading, elementary electricity, local battery telephone equipment, splicing and tying field wire, setting up and operating equipment, and the technique of wire nets. Laboratory work accompanies instruction in elementary electricity, and the structure and operation of the various pieces of field wire equipment are carefully studied in classroom demonstrations. Training is given in message center operation, so that when the men enter field training they will be prepared to operate field wire systems according to approved Marine Corps procedure.

But the high point of the course comes during the last



Circuit Tracing in Electronic School Laboratory.

four weeks, when the students put into practice what has been learned in the classrooms. Each morning the men hike to wooded areas some miles from the school, where the field exercises are conducted. Here field wire nets are set up and operated on battalion, regimental, and divisional bases. Through daily practice the men become skilled in the speedy installation and efficient operation of the various pieces of field wire equipment used by the Marine Corps. They become adept in concealing and camouflaging their switchboards, message centers, command posts and observation posts. And at the same time they become tougher and more "rugged"—for climbing trees, and carrying heavy drums of wire and pulling telephone carts through swamps and dense underbrush are not child's play.

In the field training, combat conditions are simulated so far as possible. Concealment is emphasized, and operations are conducted according to approved combat procedures. Although there is no hostile gunfire, the training is not entirely without its hazards, for the field areas abound in rattlesnakes and copperheads. This prompted a Marine on Guadalcanal to remark: "If this place had more snakes, it would be just like New River." The persistent North Carolina sand fleas and mosquitoes are also present in unlimited numbers, and occasionally a skunk launches a diversionary chemical attack. It is standard practice with the field crews that if a man has an unfortunate encounter with a skunk, he is immediately assigned to solitary duty in a well-isolated observation post for the rest of the day.

The Telephone Electricians' Course covers thoroughly the field of advanced telephony, and is designed to train men who, after adequate experience, should be qualified for duty as field wire chiefs. It is twenty weeks in length and enrolls a new class every ten weeks. Men assigned to this course are the highest ranking graduates of the Field Telephone Courses at New River and San Diego, California.

The instruction includes mathematics, electricity, Marine Corps organization, map reading, message center procedure, central office practice, technique of field radio, local battery telephone, common battery telephone, pole line construction, cable splicing, technique of field wire systems, telephone power plants, teletype maintenance, telephone testing methods, and repair of field wire equipment.

As might be expected of those who are the highest ranking graduates of the Field Telephone Course, the men enrolled in the Telephone Electricians' Course are as a rule excellent students, and there is a strong spirit of competition, particularly between the men from the East and West coasts. Occasionally, however, one of them slips, as in the case of a student who in response to the question, "Who is R-1?" answered, "The regimental agitator."

Combined Field Signal Operations

AMONG the most interesting and valuable features of the communications training program at Camp Lejeune are the field problems conducted from time to time, combining the use of the various communication agencies under combat conditions. Landing operations are carried out which include disembarkation from the mockup down rope nets into the landing boats, landing through the surf on the beaches with complete wire, radio and combat equipment, the immediate establishment of communications on a regimental or divisional basis, and the step-by-step advance for a number of miles over the dunes, through swamps and dense undergrowth, according to approved landing and combat procedures, Such problems ordinarily cover a two-day period, and require that complete communications be maintained continuously throughout that time. During the night "enemy" units harass the communications by radio interference and interception, by cutting and tapping telephone wires, and by other methods. In spite of the strenuous work involved and the difficulties encountered, these exercises are the most popular phase of the entire training.

The final test of any training program is the performance of the men in actual combat. Graduates of the communications courses at Camp Lejeune are playing an important and effective part in the achievements of the Marine Corps in combat zones. Many of them have been decorated or cited for gallantry in action. Wherever Marines are stationed, and whenever Marines attack, the communication men are there, laying wire, establishing telephone and radio nets, and maintaining the communications agencies necessary for success in modern warfare. The instructors and students of the Signal Battalion at Camp Lejeune are proud of the record of their schools.

Field Radio Station, Radio School.

Notes on Jungle Warfare

By Brigadier General Jens A. Doe

41st Division, U. S. A.

These notes on jungle warfare are based on personal experience, observation, and conversations with American and Australian officers who participated in various New Guinea operations. Subsequent operations may cause some modification of the ideas herein expressed.—THE AUTHOR.

GENERAL

IN the Southwest Pacific supply is principally by sea, and hence seaports are of outstanding importance. Seaports and the airfields which protect them become the most important military objectives. Since these are in the coastal areas most of the fighting will be adjacent thereto and hence usually in coastal lowlands. Steep mountain ranges which adjoin the lowlands are incidental operation areas even though they are certain to be traversed during a campaign. The force defending the approaches to a seaport will have been able to transport normal and heavy equipment. The conclusion follows that special light jungle equipment will not suffice in decisive actions; heavy equipment, including field artillery, can and must be provided for the greater part of operations.

b. The entire area will be covered by jungle varying from coastal tangle broken by numerous patches of kunai grass to heavy forest jungle of the mountains. The various types of forest or jungle and the mountains can, however, be combined with respect to two common factors: the cover they afford to armies, and the check they impose on maneuvers.

Among the principal features encountered will be the following:

(1) Deficiency in lines of communications. Special deficiency in transverse routes.

(2) Close country, with high temperature and humidity, involving greater exertion on the part of troops than when involved in open terrain.

(3) As a rule, limited population, sparsely settled, with scant local resources.

(4) Varying climatic conditions at different elevations. These will be further varied by wet and dry seasons.

(5) Tropical diseases, particularly malaria.

c. The principles of war and the combat methods of open warfare are applicable in the jungle. Visibility is reduced, concealment increased, affording greater opportunities for surprise in attack and defense. Formations are more compact, approaching those of night operations. Small columns are used habitually, almost to the point of actual combat, to maintain direction and for control. The compass is indispensable. Movement is reduced, tending to stabilize and to limit objectives. In defense, distances and intervals between units are reduced.

d. Infantry is the general purpose and most important arm in the jungle. Infantry and only infantry provides the movement necessary for a decision. In hills and mountains infantry may be the sole ground arm. In such cases its lack of fire power must be compensated by air support, aggressiveness, and movement.

e. In the jungle, against entrenched or well supported infantry, fire power is just as important as in open warfare. Field artillery, infantry mortars, and aviation are required to provide nceessary support. Due to the nature of the jungle, fire power may be required for a shorter distance; but infantry mortars alone will not suffice. The infantry-artillery team is the most powerful combination that can be devised for hard, jungle fighting. Due to the jungle itself, swamps and numerous streams of the lowlands, or steep grades of the hills and mountains, tank operation is restricted to the most limited areas. In certain areas, how ever, tank support may be decisive.

f. Air transport has revolutionized jungle warfare. Columns operating in difficult terrain may be adequately supplied by air transport alone, by dropping. If a strip can be made available, artillery support may be provided in areas hitherto only suitable for infantry. Ammunition and supplies can be brought up, and sick and wounded may be evacuated. Jungle-trained infantry, carrying all their arms, ammunition, and supplies on their backs, will operate alone and unsupported only in most difficult terrain, for short periods, on missions incidental to main operations.

g. In main operations field and antiaircraft artillery must be provided. The need for engineers is vastly increased. The medical service must be augmented and litter bearers, especially, increased in number. Special efforts must be made by supply services, often augmented by air transport. Radio communication is difficult or impossible, creating a great demand for wire service.

h. The assembly in an area, by water, air, or marching, is slower than in open warfare; operations from a base or assembly area are restricted, slower and limited in distance, indicating less need for motor transport.

i. With few modifications, the organization of the regimental combat team or the division is much the same for jungle warfare as for open warfare. When the situation requires, the usual procedure will be to reduce the amount of equipment and store that which is unsuitable until required or until it can be brought up. Personnel released, such as antitank and cannon companies, will be used to handle other equipment and ammunition. Task forces can be or-

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ganized also by the issue of lighter or special substitutive equipment for special operations.

Marches

MARCHES must be counted in hours or days, not in miles. The poor trail, heat, and humidity are always present. In the hills, steep grades must be overcome, and on the coastal plains, trails deep in mud.

b. No rate of march can be prescribed. The footing will vary from beach track, slipper jungle trail, to waist deep swamps; from fairly level walking to hundreds of steps in chasms or the steepest of trails in the mountains. During the rainy season the head of a battalion may march on firm though slippery ground, and the tail of the battalion will march in ankle to hip-deep mud. In the hill country the trails follow the ridges. In the lowlands, the trails tend to concentrate near streams, follow the beaches, or connect the land islands in the swamps. At times troops may walk fifty minutes and rest ten, at other times walk ten and rest ten.

c. The normal march formation is column of files. Larger formations, therefore, usually march in separate columns on the same trail.

d. Men should be as lightly burdened as possible. Normally men will have to carry minimum fighting equipment and such items as are needed for health and comfort. Full use should be made of air, motor, water transport, and native carriers to bring up heavier equipment, ammunition, and impedimenta.

e. The length of each day's march also depends on the location of bivouac areas with a water supply and natural defensive strength.

f. The general speed of the advance is influenced by the speed of supply.

g. Night advances are usually only possible if the trail has been reconnoitered by patrols and is controlled by a forward detachment.

h. Troops moving off tracks cannot keep up, and find great difficulty in maintaining contact with troops on tracks.

i. Commanders march well forward in their units.

j. Airplanes may sometimes be used to guide patrols or marching columns.

Halts

DURING march halts, the column secures itself by standing patrols.

b. Forces which halt for longer than a march rest secure themselves by means of a perimeter disposition which permits all-around defense.

c. On the march in hill country an all-around defensive bivouac is usually established astride the trail. The bivouac area should not be commanded by nearby high ground. In flat jungle mutually supporting perimeters may be established on both sides of the trail.

d. The halt for the night is made two or three hours before darkness so troops may be deployed, dug in, sheltered, and fed before dark. Men should sleep off the ground on improvised platforms or in hammocks if possible, or on the poncho.

e. In hill country, streams will influence the location of the bivouac. In the lowlands the water table is close to the surface and water seeps may be quickly dug. All water must be chlorinated.

f. Rifle and weapons squads are disposed along the outer edge of the bivouac in circular or square formations. In the rifle squad the two or three-man fox hole is generally most suitable. The distance between squads depends on the visibility and may be as little as ten yards. No field of fire is cleared; short individual fire lanes are cleared by removing the most dense underbrush only, or by cutting lanes in kunai grass. Few trees need be cut. Inside the perimeter a greater amount of underbrush may be cut to provide freer circulation and field of fire.

g. In forces the size of a company or larger, support and reserve lines are similarly organized.

h. Sniper-observer teams are established on the ground and in trees.

Security

On the March. (1) When the enemy is believed to be distant and natives are friendly, a small officer's patrol accompanied by friendly natives or constabulary may be sent several days march ahead of the column to reconnoiter.

(2) As combat becomes more imminent a fighting patrol of about a platoon precedes the column or force from an hour to half a day's march if the trail is unknown and side trails are to be explored. The patrol should be instructed as to whether or not it should maintain contact or fall back when the enemy is encountered.

(3) The marching column should cover itself with a small advance guard consisting of a point and support, and follow at about fifty yards. On trails which have been widened into jeep tracks the advance guard should be strengthened and distances increased.

(4) Flank patrols and flank guards will seldom be possible along a jungle track. They should be employed in moving through plantations, large villages, and open areas.

b. At the Halt. (1) Standing patrols should be posted to cover the approaches to a halted force. The day and night positions may not be used the same. If the halt is to be for more than a few hours, fox holes should be dug.

(2) In semi-open terrain, plantations, coconut groves, beach areas, and the like, a complete outpost may be required.

c. In the Attack. (1) After contact has been gained, the exact location, shape, and nature of the enemy organization must be secured by patrols. The organization and direction of reconnaissance is a command function.

(2) Close-range reconnaissance patrols should be small, consisting of two to four men. The two leading men move alternately, the second man covering the first to the limit of visibility, usually ten yards or less. Direction is maintained with the compass by the third man, who may also carry a sound power telephone. The rear point carries the reel of wire. The third man may at times come from battalion or regimental intelligence section. Close range patrols usually move crawling.

(3) Longer range reconnaissance patrols sent to locate the enemy flanks or rear more often consist of about twenty men to a platoon, and may include intelligence and aid men. They carry rations and may carry a sound power telephone. The usual formation is column of files, preceded

by two scouts at the limit of visibility, normally ten to fifteen yards behind the leading scout. Distances, intervals, and formations are changed in accordance with visibility.

(4) Patrols sent out to investigate trails in proximity to the enemy are organized similarly.

(5) The patrol leader should preferably have an oil compass and should be able to maintain a circuitous course. Most of the basic training for scouting and patrolling in open country is applicable to jungle patrolling.

(6) After contact has been definitely established, coordinated fire action may cause enemy troops to disclose the nature and extent of the hostile disposition, permitting the selection of points of attack.

(7) When in close contact with the enemy it may be necessary to take vigorous fire action against hostile tree sniper-observers before patrols are sent out.

(8) The orientation of patrols may sometimes be assisted by prearranged rifle or mortar signals.

The Approach March

WHEN the approximate position of the enemy has been determined, the advance to contact is made on a wider front. The formations used in open warfare are suitable, but distance and intervals are decreased in accordance with visibility. Scouts precede the formation at a distance of 15-20 yards with squads in column at about 10-15 yards distance and interval. The advance is by bounds to the scouts, the scouts moving out to the limit of visibility. Skirmish lines are not employed by the leading wave until contact has been made. In semi-open country, bounds are from terrain feature to terrain feature, usually the edges of woods or ridges, while the scouts explore the next feature to the front. When contact is expected, the battalion commander sets up the heavy mortars to cover the advance.

b. Hostile standing patrols are removed by the envelopment of support squads or platoons against their flanks and rear; if necessary, supported by deployment and fire by the leading squads, and by the fire mortars.

The Attack

THE enemy position must be accurately located, before the attack, by patrols and if need, by reconnaissance in force. An enemy position entirely in the jungle cannot be located from the air.

b. The enemy who waits in position will find it difficult or impossible to estimate the strength of the reconnoitering force and just how far away it has withdrawn from immediate contact.

c. Preparations for the attack must be protected. The track must be held in force to cover the base of fire and break up any attempted counteroffensive.

d. Based principally on the information obtained by ground reconnaissance, the commander will decide on the point and direction of attack. This should preferably be against the flank and rear, and in hill country, down hill if possible. If time is limited, or in mountainous tree jungle, it may be necessary to start an envelopment without complete reconnaissance. It may take several hours or days for the enveloping force to reach its assembly position, depending upon the terrain. A small enveloping force which places itself in rear of the enemy and astride the supply trail will frequently cause a hostile withdrawal in a few days. Such a force organizes a perimeter for all-around defense. It must carry extra rations and ammunition, including a large supply of hand grenades. It must expect to be repeatedly counterattacked by day and night. Normally, however, the enveloping force attacks from an assembly position with mortar and artillery support. It reports its progress periodically by radio or wire.

e. The enveloping force moves to its assembly position in one or more columns. Trail cutters must be changed frequently. On reaching the assembly position the attack is organized as in open warfare. Patrols must be sent forward to locate the hostile positions and cover the mortar and artillery observers. The formation is somewhat similar to that used in night attacks, with distances and intervals reduced. The interval between skirmishes is about 2 or 3 yards, and supports and reserves follow close behind in squad columns.

f. Fire support is as essential in the jungle as in open warfare. Unsupported infantry cannot breach a defensive position without incurring heavy losses. The area to be breached must be pinpointed. Artillery and mortar observers operating together may have to approach within 30 yards, and usually observe from the prone position or from a fox hole. Infantry mortars should register before the artillery. Artillery passes from registration right into fire for effect. Initial registration is made with smoke shell or by sound and nearly always adjusted by creeping. Shortly before the termination of the artillery bombardment the mortars resume their firing to cover the movement of the infantry to its forward assembly position.

g. During the mortar-artillery bombardment the assault infantry may have to withdraw a short distance to the rear of the assembly area unless it is dug in. Artillery and mortar observers, with a few riflemen, remain forward. The distance will be less if the attack is perpendicular to the direction of fire. The infantry moves to closest assaulting distance under cover of the final mortar fire, in thick jungle 50 yards or less.

h. Jungle tree snipers are not only a menace in themselves but act as observers and frequently direct the fire of ground weapons. Before the attack, during the artillery and mortar bombardment, the trees within the hostile position should be frequently and thoroughly combed by the machine guns. During the progression, tree snipers are the special task of supports.

i. Just before the riflemen start forward, machine guns should sweep the zone of attack and continue until their fire is masked. They then cover the flanks of the assaulting force. The assault wave should advance with assault fire. The enemy must be kept off balance, be given no chances to recover or to occupy positions. The timing of the infantry advance with the last major mortar salvo is accomplished by means of the sound power telephone.

j. A rolling mortar barrage may be necessary to effect a penetration, or against narrow positions in depth. The rolling barrage should be wide enough to neutralize immediate flanking fires and should also have depth. It is usually advanced by 25 or 50 yard lifts in 4-8 minutes. Riflemen should follow it closely. Sound power lines to all assault companies and mortar observers from battalion and

regiment, and batteries are necessary to assure flexibility of barrage fire.

k. On breaking into the position the assault force moves rapidly towards its objective, employing assault fire to overcome scattered resistance and prevent the formation of local counterattacks. As the interior of the position is likely to be cleared and more open, the formation will fan out, skirmishers extending. Supports may be used to widen the front. Mopping up by supports and reserves must be thorough. When the objective has been taken, strong patrols are sent back over the zone of attack to complete the mopping up. In case the advance is continued to a new objective, a detachment must be left to prevent re-entry by the enemy.

l. When no artillery or massed mortar fire is available or feasible, the infantry will have to go in flat in the "crawling attack" which is usually slow and prolonged. As a rule, bayonets are not fixed as it makes the rifle unwieldy, and it is seldom required. If bunkers or groups are sufficiently far apart they should be engaged from the front while individuals or small groups of three or four work in with the hand grenade and tommy gun. As soon as one bunker has been reduced, men may be worked up to flank adjacent bunkers. The company weapons platoon should be used to neutralize adjacent and support bunkers. Counter-snipers must be detailed from the supports to clean out enemy tree snipers.

m. During daylight, light conditions in the jungle approach those of twilight. The dim light available is necessary to advance with speed and reasonable quiet. Night movement over short distances in the jungle to an assembly area is feasible but difficult. Previous reconnaissance, posting of guides or guide wires, and the noise of machine-gun and artillery fire or of inclement weather to cover the movement will often increase the chances of success. Moonlight is usually desirable in a night attack. Night attacks in dense jungle are seldom successful. Night attacks are more clearly indicated as the density of the jungle decreases.

Defense

THE general principles governing the selection and organization of defensive positions are the same as in open warfare. When the flanks cannot be rested on strong obstacles, one or both flanks are refused so as to provide an all-around or perimeter defense. Even though the flanks or rear rest on an apparently impassable obstacle, such as swamps, water lines, or cliffs, the position should be organized for all-around defense since the jungle will permit the enemy to approach and mass within assaulting distance.

b. Organizations the size of the company and battalion on a trail position organize their own areas. Larger units organize several areas on the trail in depth. Depth provides greater protection against encirclement.

c. Approaches to a position, such as trails and firm ground, are made the responsibility of a single unit and boundaries prescribed accordingly.

d. Front-line squads are disposed as described in the section on "Halts." In addition, units the size of a company organize a support line, while units the size of a battalion and larger provide a support and reserve line.

e. Every precaution should be taken to keep the normal appearance of the jungle intact. No field of fire is cleared in front and around the position lest it become a conspicuous bull's-eye target for bombers and artillery. Fire lanes 20 to 40 yards long and 1 to 2 yards wide, normal to the position, are cut for individual riflemen and automatic weapons. Automatic weapons are also given a flanking lane. All small-arms fires should be grazing fires. Barbed wire may be laced to trees close to the position. Double apron fence, in single or double rows, is desirable if materials and time are available. Booby traps and trip wires are placed across possible approaches. Fox holes and emplacements should be connected up with a crawl or deeper trench close behind. If time permits, log and dirt splinterproofs strong enough to resist mortar bombs are constructed.

f. Observation and snipers' posts are established on the ground and in trees. Forward snipers should be posted in fox holes.

g. Mutual flanking machine-gun fires are arranged between adjacent perimeters. When the defensive disposition approaches a position defense with both flanks resting on strong obstacles the machine guns and combat groups are located as described in FM 7-5.

h. Telephone wire should be placed alongside of supply trails to guide and restrict traffic.

i. During the normal occupation of the position by day, observation is maintained by tree observers and a sentry in each squad. At night the two or three men in forward fox holes divide the night. In case of alert or alarm, sentries are increased. Before dark all personnel go to their combat positions and remain until after first light. Small-arms fire is withheld except in case of actual attack. Front-line men only use the hand grenade exclusively against suspicious noises.

j. Occupation of defensive positions must not destroy initiative and lead to a passive attitude. Few defensive battles have ever been won. The defender must not only be resolute but aggressive. The defensive should be regarded as a temporary measure whereby an advantageously selected position may be held with few troops so that a decisive attack may be delivered elsewhere. The jungle facilitates the assumption of the counteroffensive.

k. The defender must patrol vigorously to gain information of enemy activity and for the counteroffensive.

l. The principal resistance is by fire. Snipers open up on visible targets. All available mortar and artillery fire should be brought to bear on the hostile attack, preferably on its assembly positions before it is launched. Rifles and automatic weapons engage targets which appear in the fire lanes. If the enemy is able to close, he is met with the grenade and bayonet.

m. In case of enemy penetrations, troops in support positions and on the flanks hold their positions and block with fire; supports and reserves that are not engaged are moved under cover of trenches or woods to the flank of the penetration to counterattack and retake the ground lost.

n. The commander launches a counteroffensive before or after the hostile attack is under way. If launched before the hostile attack it should preferably envelop the hostile envelopment.

o. Reliefs to maintain defense can usually be made in daylight.

Supply and Evacuation

SUPPLIES may be brought in by motor transport, boat or canoe, by native carriers, or dropped by plane. In the last stage, supplies are always handled by troops.

b. Columns establish supply, motor maintenance, and salvage points, and a system of medical evacuation.

c. During an advance, advance and intermediate supply points must be established forward promptly to serve the most advanced echelons. They are moved forward with the advance.

d. Salvage is the responsibility of the task force commander since he will not be immediately backed up by a higher echelon.

e. Native supply carriers usually carry back the wounded on their return to the supply point.

Sanitation and Health

THE mosquito is more dangerous than the enemy. All commanders, starting with the squad leader, must see that protective mosquito devices are used as long as possible and that atabrine or quinine is taken daily.

b. The daily use of salt tablets is essential.

c. All water must be chlorinated by unit or by the individual with the canteen tablet.

d. Cooking should be by company or platoon as long as the situation permits. Boiling water must be provided for mess gear, else bowel disorders may be serious. The individual soldier wastes so much time in cooking that he is apt to neglect the care and cleaning of equipment, weapons, and ammunition.

e. Cuts and sores should always be treated by medical personnel if possible and not by the individual.

f. Bathing or washing and care of the feet are most important.

g. Small group or individual latrines are required during combat, since anyone walking about at night is certain to be shot by our own troops.

Communications

THE radio is very unreliable in the jungle, and restricted as to range.

b. Wire communication is the only certain means of long distance communication. For tactical operations and fire control the sound power telephone is invaluable for units the size of a patrol up to the regiment. Two lines should be habitually laid; one between the unit and higher headquarters and one to the heavy weapons.

c. Runners are necessary in the battalion and lower units. The regiment and division employs liaison and staff officers for similar missions.

Colonel Lincoln Karmany, USMC

AN old gentleman died in the Naval Academy Hospital last Christmas eve. It was not important. Old gentlemen die every day; only those who love them or expect inheritance think their going important.

But this brusque, mustachioed 83-year-old gentleman was also a Marine officer. He was Colonel Lincoln Karmany and his death was the occasion for both affection and inheritance to the Corps. Colonel Karmany was the last of the famous Naval Academy class of 1881, the first Annapolis group to furnish officers for the Marines.

He was seagoing from the day of graduation. He spent two years on training cruises before he got his lieutenancy on July 1, 1883. Subsequently assigned to vessels of the old half-steel, half-wood Navy, he had become a captain by the time of the Spanish-American war in 1898 and had six years of Naval intelligence work behind him. A tour of duty back at Annapolis followed.

His rank of major was won during the Philippine Insurrection where he served from 1902 to 1904. In December, 1904, he received his silver leaves as a lieutenant colonel. A year later, while commanding the Marine Barracks at Mare Island, Calif., Colonel Karmany was in the thick of the great San Francisco fire and earthquake. For his services, he received a commendatory letter from the Navy.

May 13, 1908, he was appointed colonel and in 1909 he was ordered again to his old station in the Philippines where he commanded the First Brigade for two years. His duties in the following years were no less arduous: in 1912, he headed a brigade of Marines on expeditionary duty in Guantanamo, Cuba, and the next year was put in charge of the Second Provisional Brigade at the same base.

From such battle stations, the colonel was transferred first to the Marine barracks in Washington, D. C., and then back to his former command at Mare Island.

In 1923, Colonel Karmany retired. He wanted to rest for awhile and to see what he could of the world. He enjoyed strange people and exotic lands where he could talk over his experiences with other old soldiers. He spent several years in France and northern India. When he returned to the United States, he was an old man and had already exceeded the Biblical threescore and ten tour of duty. He spent the remainder of his time in reminiscence and rest.

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W.R's

A YEAR AGO, when the Marine Corps Women's Reserve was still a project unrevealed to the general public and hardly a subject for serious consideration (except apprehension) for any but a few in the Marine Corps, the slogan, "Free a Marine to Fight," was merely a matter of words. No one doubted that women could adequately perform office duties in procurement offices and at Headquarters. The Marinettes did this in the last war. But more active duties—men's work—were a different matter.

The Women's Reserve will complete its first year of active duty February 15th. It has not yet grown to full strength and is constantly increasing in usefulness. But it has already demonstrated that its recruiting cry was more than words. Not only has the whole appearance of Headquarters and the procurement offices changed, but the Women's Reserve is also noticeably present at most of the larger Marine Corps posts and air stations. At Cherry Point, future aviators learn to fly in the Link Trainers operated entirely by women. Nearly four hundred motor transport drivers are handling cars and light trucks that would be driven by men were it not for the Women's Reserve. The Camp Engineer at Camp Lejeune has women welders, plumbers, electricians, and sign painters working in his shop.

In addition to freeing Marines to fight, the members of the Women's Reserve are also teaching them to fight. A woman is teaching skeet shooting at Cherry Point, and others are instructing in aerial gunnery.

The replacement of men by women is gradual and unspectacular, but the Women's Reserve has lived up to its slogan, and Marines are being released continually to take their places on the fighting front.

Japanese Bases

THE recent terrific air raids by medium and heavy bombers and carrier aircraft on Rabaul and the terrific damage inflicted upon the vessels in that vicinity appear to have made that important Japanese naval base practically unusable by larger enemy surface vessels. The more recent smashing air raids by carrier aircraft on Kavieng, in which several Japanese naval vessels were damaged, have brought what appears to be the last important naval anchorage in the entire New Ireland, New Britain, and Solomon Islands area, under the effective bombing of American planes. This, of course, was accomplished before the capture of the airfield at Cape Gloucester by the Marines and the capture of Saidar, New Guinea, by the 32d Army Division. The use of the airfields at these two points, together with the airfields which have been reported finished at Empress Augusta Bay on Bougainville, will bring the last of these important enemy naval bases under fighter plane coverage. It is difficult to see how the enemy can even continue to supply his forces in this area, let alone to use these bases for naval units to operate against Allied forces.

The loss of these naval bases throws the enemy fleet units all the way back to the Caroline Islands for fleet anchorages—a distance of more than 700 miles—or to less satisfactory anchorages along the northwest coast of New Guinea. This, of course, is only a foretaste of the Japanese Navy being crowded from one base after another as our triphibious forces push on and bring additional areas under sea and air control.

The Word on Tarawa

NOW that the sound and fury of the press which followed Tarawa has died down, something resembling a historical estimate of the comparative cost of taking that Pacific atoll can be made.

The casualty list still stands at approximately 3500 dead and wounded though a Navy recheck has indicated that this may be cut by several hundred—due to "missing" men rejoining their commands. The newspapers generally called Tarawa one of the bloodiest, if not the bloodiest, of battles in which the armed forces of the United States had been engaged. Various devices were used to indicate this: bloodiest per square foot, bloodiest in length of time, bloodiest in sheer loss.

Without disparaging the achievement of the Marines or their courage, it must be confessed in the interests of the record that Tarawa does not head the list of "bloody battles" in any sense. To an extent it was the victim of an over-enthusiastic press. One magazine led the way in a premature and ill-informed editorial soon after the battle. It gave glory to the Marines but the squaring with the facts was done in such a manner that the Marines would be loath to accept the wreath. Its editorial was one of the herd of the public notices that followed the bellwether of the ghoulish "bloodiest and the best" press philosophy. The death of Marines is not an occasion for exultation. The undue publicity attached to the Tarawa fight, no matter what pious cover-ups of speculation, lamentation, and discussions of strategy, psychology, and patriotism were used, were simply sauce for the gruesome editorial hosannahs on men who died in duty.

The facts are these. Several thousand men—the Navy has not announced the exact number—were engaged in the operation. Of these, about 3500—probably fewer—were casualties in 76 hours. And Tarawa was taken.

It was not a "bloodiest" battle. Pickett's charge at Gettysburg in 1863 may be used as a random parallel. There, in storming Cemetery Ridge, the Confederates tried to take an area of even less space than the 800-yard by two-and-a-half-mile island of Tarawa. Of Pickett's 4500-man division, advancing in the face of concentrated grape-shot and shrapnel, 3393 were left on the field in the late hours *of a single afternoon.* To supply another even more slaughtersome example, the loss of the Union forces in 1864 at Cold Harbor in a single assault was 4000—most of those who took part.

The great proportion of these men died. They did not have expert medical attention nor well-organized hospital units on the field. They did not even have competent medical attention once removed to rest areas. Nor did they have the modern pharmacopoeia of the sulfa drugs, penicillin, anaesthetics, and plasma.

The point that should be made emphatically about Tarawa is that it was a hard battle but that our grandfathers endured much worse and, on occasion, went through several such ordeals in succession. That is not diminution of Marine glory. It is, rather, a fulfillment of their job in the light of a tradition that took more grievous losses and kept on fighting.

The Marine Corps Association

MEMBERS of the Marine Corps Association will be pleased to know that the annual report of the Association shows a sound financial condition and substantial growth in membership. General Vandegrift, who becomes president of the Association by virtue of his office as commandant, has approved the report and designated a new board of directors. The list of these directors, who include representatives of the regulars, reserve, and Women's Reserve, is published on the inside back cover of this issue.

Some highlights of the annual report may be of interest for publication here. As of 31 December 1943, the assets of the Marine Corps Association were as follows:

U. S. Government Bonds	$ 3,700.00	
Cash in Riggs National Bank	18,248.27	
Cash on hand	200.00	
Accounts Receivable	351.12	
Total		$22,499.39
Accounts Payable	339.67	
Total Assets		$22,159.72

"The active membership of the Association as of the above date was 4,070. The paid circulation of the regular edition of the MARINE CORPS GAZETTE was 6,300 and the overseas edition, which was distributed for the first time in January, 1944, but printed in the previous year, was 7,500. The paid circulation of the MARINE CORPS GAZETTE at the beginning of 1943 was approximately 1,200 with membership of the Association approximately 800. The publication was a quarterly at the beginning of the year as it had been from the founding of the Association. It was stepped up to a bi-monthly in April and to a monthly in August.

"The cost of operating the Association and publishing the MARINE CORPS GAZETTE is met by membership dues at $2.00 per year; subscriptions at the same rate; wholesale distribution of the MARINE CORPS GAZETTE at 17½¢ per copy, principally to Marine Corps Post Exchanges; commercial advertising; payment by the Quartermaster of 12¢ per copy for the overseas edition of the MARINE CORPS GAZETTE; and miscellaneous sales of the GAZETTE and books ordered through a book-purchasing service. These sources of income are adequate to cover all expenses of the Association.

"It is the policy of the management to put into the GAZETTE approximately the current monthly income by increasing the number of illustrations, paid articles, etc., and maintain the present worth of the Association at approximately its present amount. The monthly income and the monthly expense at the present time are approximately $3,000 per month."

Between the lines of this brief factual report, interested members may discern the efforts of the secretary-treasurer, who is also editor of The MARINE CORPS GAZETTE, and of his staff, to provide the Marine Corps with a worthy professional magazine, and to be of genuine service not only to its membership but to the whole Corps, and to the promotion of the nation's war effort. How well we have succeeded, we must leave to others; but we take this opportunity to thank our members for their loyal coöperation and to assure them that we shall continue to do our best to carry out the objects of the Association in the days to come.

Our aim is to improve the GAZETTE continually and to make it increasingly useful to its readers. We welcome suggestions for such improvements, whether from members or non-members. And we especially hope that those whose practical experiences in the combat zone have given them new ideas, techniques, and approaches to old problems, will share the fruit of those experiences with other Marines by writing articles of professional value and interest for publication in our columns. Manuscripts—whether brief letters or longer articles—may be sent to The Editor, MARINE CORPS GAZETTE, Headquarters U. S. Marine Corps, Washington 25, D. C. Any necessary clearance for policy or security will be undertaken by the staff before the material is published.

Color Prints

WE have available a few reprints of the illustrations in color published on our December and January covers —Lieutenant General A. A. Vandegrift and Major General Roy S. Geiger. While they last, we shall be glad to send a copy on request to any member of the Marine Corps Association, or to unit commanders. Address the Marine Corps Association, Headquarters U. S. Marine Corps, Washington 25, D. C.

Mechanized Warfare

THE more mechanical become the weapons with which we fight, the less mechanical must be the spirit which controls them.—MAJ. GEN. J. F. C. FULLER.

Airbases for the Future

By Burnet Hershey

IF I were a Leatherneck doing a job of Jap killing in the jungle, I would get a laugh out of some of the tall talk people are indulging in around Washington, especially on the subject of the Pacific bases. I would say to myself that I was the fellow who was taking most of these bases away from the Japs and here are these birds talking glibly and loosely regarding their eventual distribution. Here is one senator who says we should keep all of 'em—even those belonging to our friends and Allies. Here's a man who has forgotten what happened to those Marines left behind on Wake and Guam, shooting off his mouth about how these places ought to be "demilitarized" after the war because they're of no value commercially!

The debate waxes furiously. The radio forums and round tables resound with facile and irresponsible opinion about these distant bases on which the blood of our young fighters has not yet coagulated.

This writer has also done some tall talking and thinking on this moot question of what to do with the islands and bases we reconquer from the Nipponese. Out of his inquiry and observations has come this one, overall conclusion:

The air bases we need to protect America don't belong to our Allies. They belong to our enemies—particularly Japan. That's the plain truth of a situation which has been more misunderstood, or misrepresented, than any other in the whole complicated debate about our future military needs.

In the Pacific, Japan has the vital island bases lying between Hawaii and the Philippines because we let her take them in 1919. Before that, most of the island groups had belonged to Germany, and Japan was permitted to hold them as spoils of war under a mandate from the League of Nations with the strict proviso that none of them was to be fortified or developed for any military or naval purpose whatever. Of course, Japan sneered at that, and started building airports as soon as she could rush a boatload of Jap slave labor to Truk and Palau and Yap and the hundreds of other dots that make up the Marshalls, the Carolines, and the Marianas.

Out of these myriad islets Japan built the finest aerial defense—or offense—system in existence. No one of the islands alone is impregnable, or anything like it. But taken all together, the network of air strength that Japan can bring to bear from all directions as a threat to any one point is the strategic reason for our slow progress in the Pacific campaign. Without all this network of airbases, Japan could not hold us up from driving directly at her home territory.

If we had kept the islands in 1919, Japan could never have attacked Pearl Harbor, nor would Wake and Guam have fallen, nor even the Philippines. Some 50,000 good American soldiers, sailors, and marines would still be on active service to defend our country instead of being dead or starving on Japanese prison rations.

As I point out in my book, *The Air Future,* there is no need for any squabble with our Allies over bases in the Pacific. The bases we need—the islands lying between Hawaii and the Philippines which together with the Aleutians give us control of the Mid- and North Pacific—were given to Japan as spoils of war from Germany. When we've reconquered them, all we have to do is to maintain them as security bases, developing one or two of the most suitable for commercial air junctions.

Commercially, our line to Australia would be from Hawaii 1,300 miles to Midway, 1,200 miles to Wake, 1,300 more miles to Truk, all on our territory, and then 1,200 miles down to Port Moresby on New Guinea, which is Australian soil.

As an alternative we already have joint ownership with Great Britain of the Ellice Islands, which will be a commercial stop-over as well as a security base for future air police patrols.

Over in East Africa we have a base at Asmara, in territory that used to belong to the Duce's empire. We don't have to ask the British or anyone about that. We don't need to filch from an ally. All we need is the guts to keep what we've taken from our enemy.

In Liberia, on Africa's West Coast, we have some fine airbases, just as good as anything we've built in contiguous British territory; and the Liberians hope we continue to use our bases in their country. It's good business for them—and it's certainly good business for us.

Our Travelling Senators seem to think we ought to demand sovereign possession of the bases we have built here and there and everywhere for military purposes. It is obviously true that we ought to get long-term agreements for mutual commercial use of such bases as are properly situated for future commercial air travel. But it is also true that if we take the islands we are earning in the Pacific, our air control of bases in that watery hemisphere will be such that fair exchanges of airport privileges in that area will give us profitable advantage for dickering on other airports anywhere in the Anglo-Saxon world.

The Atlantic is admittedly largely a British proposition. Still, we have 99-year leases on the best airport sites around the Caribbean, and our northern route depends on how well we can do business with Canada and Denmark—not London. Greenland and Iceland are more important to us than Labrador or Newfoundland.

On the mid-Atlantic route, there's no reason why a friendly business deal should not be made with Portugal for use of the Cape Verdes, better as bases and more logical than trying to fuss with the French over rights at Dakar.

Likewise some shrewd pressure on Spain, which isn't a very close friend, should yield a century-long lease of aviation ground-rights to the Canaries, even more convenient for commercial and security purposes than the Azores.

It all sums up to this: In airbases, the British haven't got what we want. The enemy has. Let's take it from the enemy—and keep it!

Marine Artillery in Guadalcanal

The Story of the 11th Marines

By Brigadier General Pedro A. del Valle, USMC

Marine antiaircraft guns protecting a landing strip at Henderson Field.

ON 17 October, in addition to heavy air bombardment by our aviation, the enemy forces to the west were shelled by two destroyers. A direct hit from an enemy naval shell struck a dugout occupied by Captain Gillespie of our 5th Battalion, 11th Marines, together with eight men of his battery headquarters, all of whom were killed. These severe and continuous attacks took their toll of casualties and among them we had to evacuate Lieutenant Colonel Bemis, Lieutenant Colonel Price, Lieutenant Colonel Knowlan and Chaplain Ditmarr. The 11th Marines' command post began to move to a new location on an island in the Lunga Delta, the previous location having been wiped clear of all concealment by naval shells and air bombardment. The total strength of the regiment dropped from 2600 to 2400.

On 21 October the enemy continued to fire harassing fires on our airfield while the 11th Marines fired harassing fires into their areas to the west and attempted counter-battery fires. Enemy aviation was extremely active, especially at night in the bright moonlight.

On 22 October the artillery duel between the Japanese and the 11th Marines continued while two destroyers shelled the Japanese positions to the west. Aviation continued bombing and strafing attacks. The Japanese made two night air raids and one daylight air raid. The Commandant, Lieutenant General Thomas Holcomb, USMC, visited the command.

On 23 October "Dog" battery of the 2d Battalion, 11th Marines, received a direct hit from enemy artillery on number one gun which was demolished. All batteries, save two, were shifted to new positions west to fire beyond the Matanikau. The concentrated fire of ten of our batteries in this area drew considerable enemy artillery fire and our forward observers were able to locate two batteries, one of which was silenced and the other silenced and its ammunition set on fire. The enemy evidently was expecting an attack and had assembled his tanks in the vicinity of Point Cruz. The fire of the 11th Marines was brought upon this force and it was temporarily dispersed. We continued to interdict the beach road throughout the night. Enemy air attacks continued in spite of unfavorable weather, with dive bombers and Zeros.

On 24 October the 11th Marines fired ten batteries in support of McKelvey's battalion of the 1st Marines which was holding the west front along the Matanikau. The enemy made a determined mechanized assault over the sand spit at the mouth of the river, after laying down a severe artillery preparation lasting from 1900 to 2100. They were repulsed with heavy loss, as by good fortune the artillery caught the enemy infantry concentrated to follow the tank

Commendation

11th Marines, commendation of, for effectiveness of fires delivered against enemy forces, 23 October, 1942.

1. The Commanding General commends the 11th Marines for the remarkable effectiveness of fire delivered in support of the 3d Battalion, 1st Marines, during an attempted tank assault upon its position at the mouth of the Matanikau River, Guadalcanal, British Solomon Islands, during the night of 23 October, 1942. The fire of the 11th Regiment which was delivered promptly on call is directly credited with the disabling of three 15-ton tanks and with the virtual annihilation of a unit of the enemy forces approximating a battalion in size. The repeatedly demonstrated effectiveness of the fires of the 11th Marines is a tribute to the technical proficiency and devotion to duty on the part of the Regimental Commander, Brigadier General Pedro A. del Valle, and the officers and men of his regiment.

A. A. VANDEGRIFT.

attack and an entire Japanese regiment was destroyed.

The 11th Marines continued harassing fires all night and interdicted the beach road for the purpose of interfering with the Japanese withdrawal. The weather was changeable with alternate clear bright moonlight and heavy showers of rain. During this action several 75mm pack howitzers became unserviceable due to stripped recoil collar screws and one broken equilibrator spring. This took all our spares in this caliber and a mishap to one of the 105 howitzers took our last spare gun tube in that caliber. Spares were requested by dispatch as well as ten units of fire for all calibers. We were then down to three units.

On 25 October the 11th Marines continued to fire counter-battery fires west against enemy batteries which were firing into the perimeter and against our ships. The 1st Battalion, 11th Marines, supported the 7th Marines against an attack from the south in the vicinity of Bloody Ridge while the 3d Battalion, 11th Marines, went into positions to fire east and southeast in support of the 164th Infantry. Some enemy cruisers came into the harbor and sank a YP boat and a tug off Lunga Lagoon. Enemy air attacks were practically continuous through the day and resulted in his loss of twenty-two Zeros and six bombers. The 2d Battalion, 11th Marines, had one officer, Captain Bishop, and seven men wounded by artillery fire. The night of 24-25 October it rained all night which drove our men out of their emplacements. The uncertain overhead permitted enemy low flying aircraft to attack the airfield and our battery positions.

THE enemy's night attack against our south flank, defended by Puller's battalion of the 2d and supported by the 1st Battalion, 11th Marines, was repulsed with heavy loss. Again it is believed an entire regiment was destroyed. An attack against Hanneken's battalion in the southwest drove a sharp salient into our lines in that area. Backed by the fires of the 11th Marines, Hanneken's battalion counter-attacked and drove the enemy out with severe loss. In this action also the enemy was estimated to have lost an entire regiment. Our air force reported heavily damaging an enemy cruiser, while some B17s reported hitting another and probably sinking it. "I" Battery of the 10th Marines was attached to the 1st Battalion, 11th Marines, then under Colonel Curry who had been borrowed from the 10th Marines to command that battalion. They were engaged in interdicting the road between Matanikau and Point Cruz during the night.

On the 26th the 11th Marines continued counter-battery, interdiction and supporting fires against enemy attacks on our southwest and southeast lines. The enemy's artillery shelled us heavily for about fifteen minutes prior to darkness. This looked like a preparation but was so widely dispersed that we could not identify any particular sector as being its object. An attack against the 164th Infantry in its northeast corner later developed and was repulsed with great loss to the enemy. This unit was supported by the 3d Battalion, 11th Marines.

On 27 October we continued counter-battery, interdiction and supporting fires. The enemy made some minor attacks on Bloody Ridge during the night but were repulsed without difficulty. At 0400 the enemy made an air attack. Later in the morning General Vandegrift returned. Apparently the enemy still was facing our lines on the south and on the west but had sustained serious losses during the operations just described. Our losses were remarkably small, while the enemy dead along our front were piled high, and in spite of all our efforts to bury them, constituted a definite menace to our health and comfort. The 11th Marines continued harassing interdiction and counter-battery fires displacing its battalions and batteries as required to cover the situation.

On 29 October the 11th Marines fired in support of the 164th Infantry, still on the southeast sector, and other interdictory and harassing fires as well. The enemy had infiltrated through the infantry positions, and the 3d and 5th Battalions, 11th Marines, were alerted as infantry to protect the bivouac and prevent penetration to the airfield. A night air raid by the enemy was beaten off; they jettisoned their

The remains of an air raid. The CO of the Headquarters and Service Battery is blown out of his abode.

Bivouac area on Guadalcanal.

bombs and fled westward in the bright moonlight. Our aviation harassed the enemy positions to the west and a striking force raided the Jap air base at Rekata Bay in Isabela Island. This was the seventh consecutive day of land fighting along various points of the perimeter. The artillery had participated in every engagement, and the men were pretty tired.

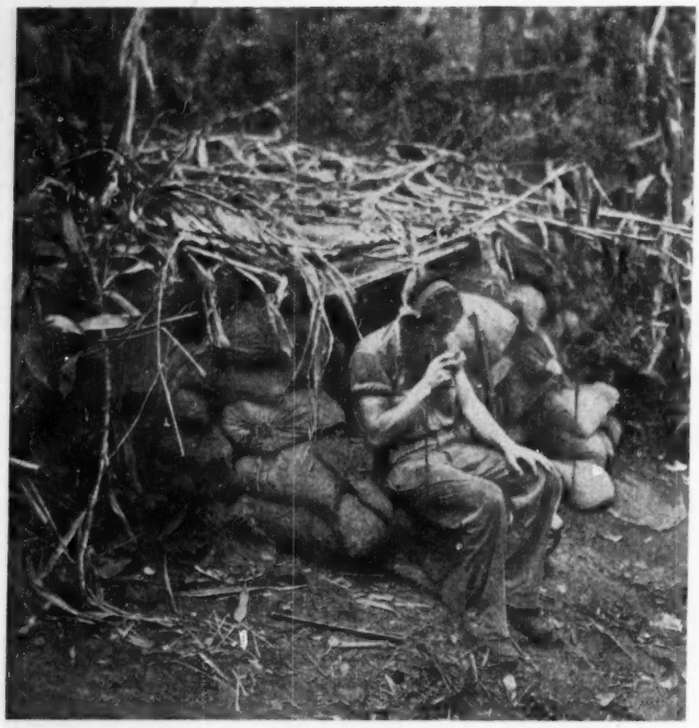
We, nevertheless, continued harassing fires to the west, and during the night of 29-30 October we fired defensive concentrations in front of the 164th Infantry on request; they had apparently heard movement beyond the wire. Enemy air attacks began to show a new pattern. The one on the 30th turned back twenty-five miles before they reached us and raced for home. The night was dark and rainy, hence no night air attack was made upon us. Our ground troops got a much needed rest from enemy attacks by land. Our aviation worked over some enemy destroyers which they had spotted in our waters. Admiral Scott, with one cruiser and three destroyers, shelled the enemy to the westward; Major Nees, the Assistant R-3, was on the flagship to assist in fire control. Aviation harassed the enemy to the westward all day. The 11th Marines and attached artillery shelled them all night.

We were expecting fresh troops on 31 October, and so the enemy put over a dive bomber attack but dropped no bombs, as the ships had not arrived and they were probably meant as the objective. The Japanese artillery shelled our positions at 0700, merely harassing fires. The enemy night air attack came over, dropped flares on our positions, but dropped their bombs to the west in their own lines. We received orders to prepare to make an offensive to the west.

At 0630 the offensive began to the west, with the 5th Marines, then commanded by Colonel Edson, making the assault. This attack was largely a frontal one, although Colonel Whaling, with a mixed force including scouts and snipers, made a limited turning movement along the hills south of the enemy positions. The 11th Marines had emplaced all batteries save the 1st Battalion and "Item" Battery, 10th Marines, to support the attack. The latter were emplaced to cover the perimeter defensively in support of the infantry lines. A preparation and successive concentrations were fired, supplemented by interdictions of the enemy's main line of communications along the beach trail.

By 0900 on 1 November the attack had reached the north and south line through Point Cruz. It looked as if they would crash through. The 3d Battalion, 11th Marines, was attached to the 5th Marines and arrangements were made with amphibian tractors to ferry them across the Matanikau.

AT 1230 on 1 November the assault started toward the second objective. The 3d Battalion, 11th Marines being well forward, were prepared to cross the Matanikau, while the 2d and 5th Battalions, 11th Marines, supported the assault from positions in the vicinity of the new fighter strip east of that river. We had less than five units of 105mm ammunition and less than three units of 75mm ammunition left, but there were four batteries unengaged. We did not spare the ammunition we had, as we had more coming. We also had some batteries of 155mm guns on the way for use in counter-battery. The two commanding officers of these batteries, Captain O'Reilly of the Army and Captain Steidtman of the Marines, arrived at this time. They came by air and the enemy was shelling the airfield when they arrived. No better method could have been devised to impress these officers with the need for prompt emplacement of their batteries. The enemy artillery continued shelling



An artillery fire-control dugout on Guadalcanal.

our positions throughout the day, while we countered with the fires of the 5th Battalion, 11th Marines.

B-17s and some of our own aviation supported the attack by bombing and strafing the enemy positions. No enemy air was on hand during the day, and the night was unfavorable for air operations, so we had a twenty-four hour respite from this source of annoyance. Enemy infiltrations occurred along the south front, small parties attempting to penetrate our lines, but with indifferent success. One Jap was killed in the bivouac of the 3d Battalion, 11th Marines.

At about 1500 on 2 November our assault had reached its second objective and began its preparations for the night. One battery of the 3d Battalion, 11th Marines, had displaced to the west of the Matanikau, while the remainder of the battalion was getting ready to follow. Enemy resistance had not been too determined, and prisoners stated that they were burdened with a great many sick and wounded. The artillery lost one killed and three wounded.

The two batteries of 155mm guns arrived by sea, together with some badly needed ammunition for the light batteries. We now had better than five units for the 75's and over three units for the 105. Two of the destroyers which escorted this convoy supported the attack by shelling the enemy to the westward. The 8th Marines were expected to arrive at any time. Things were beginning to look a little more cheerful. An offensive always improves morale.

THE situation on 3 November, the third day of our attack, was approximately as follows: Colonel Arthur's 2d Marines had gone through the 5th Marines to the second objective. All enemy save some 300 left in a pocket on the beach were cleared out of the area; the exhausted units of the 5th Marines were being replaced by the relatively fresh troops of the 164th Infantry. Both my 155mm batteries were emplaced in surveyed positions, one to the west and one to the east, and both were registered.

The enemy shelled our front lines and the airfield at 0700 with their field artillery. Enemy dive bombers approached to attack, but did not close, in spite of the considerable number of ships in the harbor. Evidently the Japs were busy landing troops, because units of their 38th Division, known as specialists in taking airfields, were landed near Taivu Point, to the east of Koli Point. These included two battalions of infantry, a mountain battery, two antiaircraft battalions, some engineer troops, and a signal unit.

Hanneken's battalion of the 7th Marines was in position near Koli Point. He made contact during the night, and was supported by Steidtman's battery of 155mm guns, which was emplaced facing east in the wooded area near the eastern extension of the main airfield. This battery fired unobserved fires upon the enemy's landing beaches and along the trails leading therefrom during the night 3-4 November. Since they were well surveyed, registered, and supplied with accurate meteorological data, it is believed their fires were effective. At any rate it was the only artillery with which we could support Hanneken in his isolated position. He held the enemy in check, fighting a rear guard action until he reached a good defensive position.

On the 4th the 8th Marines arrived, and the escorting ships shelled the enemy both in the east and in the west. Our aviation continued bombing and strafing enemy areas in support of our infantry. The 1st Battalion, 10th Marines, 75mm PH, Lieutenant Colonel Rixey commanding, reverted to artillery control and was emplaced covering the southeast. Curry's battalion, 1st Battalion, 11th Marines, was displaced eastward beyond the perimeter past the Ilu River, during the night 3-4 November. As there were no infantry in the area and none then available, the SW Battery, 11th Marines, Major Viall commanding, was dispatched as a flank guard and took position to the south of Curry's positions. Colonel Curry sent a forward observer party with wire through no man's land and succeeded in reaching Hanneken's position during the night, thus establishing the first wire circuit to those troops. During the day Puller's battalion of the 7th Marines arrived to support Hanneken, and the remainder of the regiment, plus the 164th Infantry, were made ready to attack the elements of the 38th Jap Division in the eastern area. Lieutenant Colonel Carlson's raider battalion, which had landed at Aola, was started overland toward Koli Point.

5 November found the 11th Marines supporting actions to the east and west, and at the same time maintaining certain batteries in readiness to fire south or north. The action to the east against the Japanese 38th Division was originally entrusted to General Rupertus. He had the better portion of the 7th Marines and the 164th Infantry. Supporting these troops directly were the 1st Battalion, 10th Marines, and the 1st Battalion, 11th Marines, while the 155mm gun battery of the 5th Defense Battalion was in general support. The direct support artillery was attached for the operation, which was at some distance. The mission of this force was to prevent the enemy from establishing himself securely in his Taivu Point beachhead, and eventually to destroy him.

General Sebree of the Army relieved General Rupertus when the latter fell ill with the dengue fever. The opera-

tion was carried out successfully, the enemy being pocketed and destroyed in part right on his beachhead. The remnants that escaped the ring placed around them sought safety in the hills to the south. These were pursued by Carlson's raiders, supported by Rixey's artillery battalion. Very few ever reached their compatriots to the west of the Matanikau.

THE necessity to destroy the Jap 38th Division in the east unfortunately put a stop to our offensive to the west. Hence our 2d Marines were withdrawn, covered by the fires of the 11th Marines, until they occupied a line about a thousand yards west of the Matanikau, where they dug in for defense until the issue in the east was settled. Our 3d Battalion which had partially displaced across the river was withdrawn and re-emplaced defensively.

The enemy landed more troops about 5 November near Kokumbona, to the west. He likewise maintained heavy air assaults which were countered by our aviation with great loss to the Japs. It was evidently the all-out attack which was brewing. Our aviation had its hands full, but they did a splendid piece of work. Discovering a large convoy containing twelve transports, they managed to sink seven. One turned back. Four, in a damaged condition, got to Guadalcanal and were beached. They probably disembarked most of their troops but very little of their matériel. The aviation gave them no rest. A U. S. destroyer shelled them, as did O'Reilly's 155mm gun battery. Soon they were fiery columns; they were completely gutted.

The story of the heroic fight of Admirals Callaghan and Scott against greatly superior Jap naval forces on the night of 13-14 November will always be remembered by those of us in Guadalcanal at the time. Our fate depended upon the outcome. They did not fail us, and we lived because they died. The enemy had overwhelming forces to use against us, and he had orders to kill. Only a few were to be spared to march in Tojo's triumphal parade back in Tokyo.

The fighting on land went on while these sea and air actions were in progress. On 6 November the artillery was still supporting the main actions on the two fronts. Lieutenant Swisher of the 11th Marines was killed by an enemy shell at the 2d Marines C.P. An enemy patrol killed two men of Rixey's 1st Battalion, 10th Marines. The enemy's artillery was countered by the fires of O'Reilly's 155s. We were using air spot with radio, an SBD being placed at our disposal for the purpose.

On 19 November an attempt was made to renew the offensive to the west, but the going was very slow, and after four days of indecisive, if severe fighting, both sides dug in. It seems the Japs had built up their forces, by use of submarines and destroyers, at night, to reinforce and supply them. They too had started an offensive, employing their 16th and 29th Infantrys. When they decided to dig in, the Jap lines extended roughly from Mount Mambula (also known as Mount Austen) along a north and south line west of the Matanikau to the sea.

From this time until the relief of the 1st Marine Division, the 11th Marines were constantly engaged in support of small forays made offensively into enemy territory, in harassing the enemy positions to the westward, and in counter-battery fires. Assisted by aviation and by naval units, the process served to soften up the Japs, and rendered his artillery, both ground and antiaircraft, ineffective. The regiment was reinforced by several battalions of army field artillery and by Verbeck's battery of 155mm howitzers from our own Corps artillery. The latter unit did excellent work, and it was particularly gratifying to us to have them, for they had formed part of the regiment prior to being transferred to the Corps. The Army units were all first class, and the uniformly excellent Fort Sill training upon which their techniques and ours were based made the combination a frictionless and highly effective machine.

As the time approached for our departure, Colonel DeMuth and later Colonel Woodward took up their quarters at the 11th Marines C.P., and their able staffs worked along with our own in the operations dug-out. The transition was very smoothly accomplished, and the enemy were given no respite. When our weary gunners finally climbed on board the transports we knew we had left things in competent hands. The history of the final offensive, which drove the enemy off the island completely by 9 February, 1943, shows how our successors carried on.

The 11th Marines were evacuated to rear areas commencing 9 December, 1942. They were reassembled for reorganization, re-equipment, training, and the reconstitution of their strength in a camp situated at some distance from the main portion of the division. Here the new commander, Colonel Robert H. Pepper, USMC, took charge.

In concluding this historical sketch, their former commander salutes these heroic officers and men who fought the guns so effectively on Guadalcanal. Wherever they may be, the infantry will know they have an able and willing teammate ready to blast a way for them, and the Corps and the country can point to them with pride.

(THE END)

Ships Named for Victories

COMMEMORATING the recent victories of Tarawa and Makin, the Secretary of the Navy has approved the naming of two naval vessels in honor of American valor in those engagements. A large aircraft carrier under construction at the Norfolk Navy Yard has been designated the U.S.S. *Tarawa.* An escort carrier, formerly scheduled to be called the *Woodcliff Bay,* will be christened the U.S.S. *Makin Island.* These vessels, with others, will seek to avenge the loss of the U.S.S. *Liscombe Bay,* sunk in the Gilberts operations.

"Black Sheep Pappy"

By Captain Richard G. Hubler, *USMCR*

ONLY three American fighter pilots have been aces five times over. The first was a dapper, smiling Army captain of the first World War—Eddie Rickenbacker. Rick and his Hat-in-the-Ring Squadron shot down 21 German planes and five balloons. His record stood unchallenged for 24 years.

The second was Captain—now Major—Joe Foss, the grim, businesslike pilot who fought with the Marines at Guadalcanal. He and his Number 13 Wildcat F4F sent 26 Japanese Zeros and bombers flaming into the Solomons jungles.

The third of the alltime fighter pilots shot his way into that Valhalla a little more than a month ago. He was another Marine—Major Gregory Boyington of Okanogan, Washington. He and his Black Sheep Corsair F4U scored off their 26th Japanese plane on January 3, 1944.

His teammates confirmed the kill. Boyington never came back from the flight. But it will take more than that to convince the members of his squadron that Pappy some day won't show up. He was the kind of colorful hero that legend will not let go forgotten.

Out of the 600,000 words in the English language, the best word for Boyington was "fighter." He liked fighting like nothing else. The chunky little pilot with the heavy brows and the swagger-walk was as pugnacious as a bee with distemper. Especially in the air.

He got his first sample of altitude with Clyde Pangborn, the amiable round-the-world flyer. In 1918, when Pangborn was a busted barnstormer, he took Boyington aloft with him to toss out handbills to the populace of St. Mary's, Idaho, where Boyington's family lived. The youngster must have swallowed one of the blurbs whole, for he was never satisfied on the ground again.

The Boyingtons moved to the state of Washington. There the future ace went to the University of Washington and took a B.S. in aeronautical engineering. That was in 1934; a year later, he joined the Marines as an aviation cadet. He was less proud of his diploma than of the fact that he had been an intercollegiate wrestling champion.

But the Marines didn't give Boyington enough action in the air. He did a lot of flying—stunt exhibitions at the Miami and Cleveland air races, maneuvers at Guantanamo, Cuba, a short apprenticeship on the carrier *Yorktown*—but none of it was action stuff.

WAR broke. Boyington itched to get into it. The offer of a job paying $600 a month in China fighting the Japanese in the air over Burma was exactly the tonic that his pugnacity needed. He resigned his Marine commission as a lieutenant in 1941 and became a member of the American Volunteer group of General Claire L. Chennault.

The Flying Tiger pilots learned to know his toughness and his skill at the first echelon air field at Toungoo. "He's got enough nerve to service the squadron," they said. "He's not afraid of anything that walks, crawls, or flies." They made it plain that the first category applied to themselves, the second to the Japanese, and the third to their patched and obsolescent planes.

Occasionally Boyington picked a fight with his mates, perhaps just for practice. Invariably it was someone bigger; almost invariably, he was licked. But his belligerent efficiency got him the post of executive officer with the AVG.

He was credited with six official kills of Japanese planes before the United States entered the war. When Boyington got back home he promptly made application to get into the Marine Corps again and was whisked off to the Pacific once more.

He was stationed in the Solomons. Here his first bad luck hit him. He broke his leg. Boyington shouted his objections bitterly to no avail; he was hospitalized for seven months.

It was August, 1943, before he got into the combat area. He was one of the oldest and most experienced pilots in the Marines in that theater despite his long layoff. Thirty-one years old and with 2500 flying hours to his name in the log, he was "Pappy" to his pilots. Boyington proceeded to live up to his nickname.

He considered himself the group mentor and coach. Not many commanders would have cared for such an outfit. Most of the pilots were "eager misters"—green pilots

Major Gregory Boyington, USMC "Pappy" of the Black Sheep.

without combat experience. Boyington nursed them along, weaning them by his own knowledge. He taught all he had learned in Chennault's deadly school of flying as a member of the AVG: how to keep together, how to fly wing, above all, how to hold fire until the target was near and positive. They nicknamed themselves the Black Sheep squadron.

Pappy did not bide in showing his men how to strike and blast the Japanese. The first time he led his Black Sheep into combat, he accounted for five planes on his own. The boost to the morale of his squadron was immense and after that the work of his pilots led the rest in the South Pacific theater.

Boyington designated two happy hunting-grounds within reach of the advanced Pacific Marine air base: the powerful Kahili airfield at the southern tip of Bougainville Island and the greatest Japanese air bastion in the South Pacific—Rabaul on New Britain. After that first five-Zero score on September 16 over Vella LaVella, he continued his rampaging at the same incredible pace. While leading a flight of six planes over Kahili soon after, Pappy and his boys ran into 50 enemy fighters. Without hesitation, they took them on. In the whirling battle which followed, Boyington was credited with three more Japanese Zeros. He claimed—and it was confirmed—that he got them all within 60 seconds.

A few days later, Boyington and his crew devised a deadly humor. Again they went over Kahili. There they circled mockingly and challengingly above the airfield, ducking the antiaircraft bursts. Twenty Japanese planes came up to fight. Twelve were shot down. Boyington got three more.

Once, when his motor cut out after a strafing mission, Pappy landed at an emergency field. From there, after the defect was remedied, he cut back to Kahili alone. He dove the length of the airport 50 feet off the ground and shot up two Japanese bombers in revetments. On the way home, he saw an enemy destroyer and strafed it; spotting a nearby Japanese barge, he emptied his guns into it in a long burst and got back home untouched. In a month during that early fall campaign, Boyington and his pilots shot down 58 planes.

IT was already apparent that Boyington was to become one of the great Marine fighter pilots. One day at mess a friend asked him if he wanted the record. Pappy pounded the table until the cups jumped. "Sure, I want it!" he shouted. "Who the hell wouldn't want it? I'll make it 35!"

He developed a habit that was an unconscious adaptation of the old Richtofen technique in the first World War—he and his men sat up in the clouds waiting for the Japanese to take off so that they could pounce on them. To this scheme, however, Boyington added his own typical variation. When he could locate the Japanese wave-length on the radio, he would curse them continuously in a low, biting growl,

Once, at Kahili, the Japanese got his wave-length. "Major what is your position please?" came a mysterious voice. Boyington guessed its source. "Right over your damned airfield!" he replied. "Come on up and fight, you yellowbellies!"

"Why don't you come down?" inquired the voice. Boyington and his wingman immediately dove down and strafed the field. Then he returned to fighter height.

"Okay," said Boyington in his hackle-raising growl. "I've come down. You come up." But no Japanese fighters took off.

He got one or two rest periods. He might have had a ground berth but he didn't want it. The headquarters for Marine aviation in that area put in a special request that Boyington be retained as a combat leader. "Hell," said a spokesman, "with a guy like that the Japs won't even get into the air."

On October 4, Pappy and his wingman caught sight of 22 Japanese Zeros. Both of them plunged in to fight and Boyington exploded one Zero with a single burst, whirled around and riddled another until it burned and fell, then shot up a third so badly that the pilot had to bail out. "He jumped straight out when I put a burst into the fuselage," said Pappy. His wingman got a fourth Zero.

Those were Boyington's 19th, 20th, and 21st planes. He had become one of the top aces of the war but he was not yet satisfied. The record was in sight and he was after it.

December 23, he got four. He described how he did it in a recorded radio interview.

"The first contact I made was with a lone Zero that made a pass at the tail of my formation. I just kept following him down from about 18,000 down to about 6,000 when I finally bore-sighted him from about 50 feet behind and blew him up in flames. . . .

"The second time I saw Zeros, there were two of them. I thought at first it was one of our planes being attacked by a Zero. I went up and found it was a Zero that had been crippled.

"I caught this one on fire from about 100 yards behind. The pilot bailed out and the other Zero turned on me and I pulled out of his way. The plane crashed in the water and the pilot landed not far from it.

"The escorting Zero went down and circled around the pilot in the water. I came down from 10,000 feet, unknown to him, out of the sun. I got within about 50 feet behind him and set him afire and he never bailed out. . . .

"I went to 18,000 and circled over Rabaul for about 20 minutes. I finally located a patrol of nine Zekes in V-formation. I came down unknown to the Zekes and picked off the tail-end man and then ran like a son of a gun."

ON the ground, Boyington lived as happy-go-lucky as he flew. He chose his friends regardless of rank and stuck to them. The bulldog and boisterous ace was going to go his own way, hell or heights regardless.

His last combat tour was coming to an end. Boyington knew he was regarded as too valuable as an instructor and ground officer to be let into fighting raids again. In his mind, his world developed into a desire to beat the record of Foss and Rickenbacker and a desire to get back to the United States to see his three children.

By January 2, 1944, he had a score of 25 planes. He needed one more to tie the record, two more to surpass it. And the order of the day was a raid on Rabaul.

Fifty fighter planes took part in the raid. Boyington, according to the accounts of the battle, developed an oil leak en route. His mates saw him reaching out of his cockpit

with a rag to wipe away the black oil that clouded his vision. His urge to fight was flaming as much as ever. His guns spat at a Zero and it was an instant huddle of flame. He had realized the first part of his ambition. Only one more.

They saw him finally diving out of the sun on five Zeros with his faithful wingman close behind. That was all. There were no reports further and Pappy did not come home.

A reckless search by the rest of the Black Sheep squadron did not locate him. Though they cruised above the water with the propeller tips kicking up spray across their windshields, there was no sign of Boyington.

"He may show up and he may not," said one of the squadron soberly. "But if he doesn't, the American people ought to know that they lost the best and the bravest guy that ever came out here to fight for them." He paused and added an afterthought. "The Japs know it already."

Which is as good a word as Pappy would want said about him by anybody. He never got a decoration of any kind because his guns worked faster than the red tape of awards. Though he would never have admitted it, a good word from a friend was more to him than any award, even more than the record. Now he had it and it was enough.

Amphibious Training

By Brigadier General Frank A. Keating, U.S.A.

AMPHIBIOUS training is more than men, equipment, and boats. Complete Army-Navy coördination and teamwork are mandatory—no other word will describe the relationship. The two services should live and train together, preferably under a unified command, and each must thoroughly understand the technique and tactics employed by the other. This is so even though both services may and will accomplish some of their amphibious training independently.

The passage of the beach, establishment and defense of the beachhead, communications, and all phases of supply and resupply are the main features which must be stressed in amphibious training by the Army components. The Navy must likewise emphasize the training of boat crews and communications personnel, and both services must have a common, integrated, technical and tactical plan in mind throughout their separate and joint training periods. The Army and Navy are totally dependent upon each other and neither can succeed alone in a landing operation.

It is not enough to say that any military or naval unit, no matter how well-grounded it may be in the basic principles of field and naval service, and modern warfare, can quickly learn amphibious warfare. The troops must get advanced tactical training to include all forms of offensive operations of the infantry combat team, and the naval personnel must have a thorough knowledge of landing doctrine. Troops must be well-grounded in the team play and technique of a combat team because without this background, the task of training a military unit in amphibious warfare is like teaching algebra to a class which has not learned basic arithmetic. Unless the men of both services are equally indoctrinated when they unite for the combined training, and both have had the same elementary schooling, the situation will be marked by confusion if not chaos.

One marked distinction between amphibious and other forms of warfare—and this is a matter of paramount concern—is the uncertainty and lack of control which confronts the small-unit commander from the moment embarkation begins until the initial phase of the landing is completed.

At best, the troops will then be dispersed, and the fight may take place where it is neither desired nor expected. The distinction between an amphibious operation and a land attack might be likened to a football game that began with each side rushing onto the playing field from the locker rooms. The military unit commander's real job begins when the first soldier steps ashore. Until then, he can do very little to influence the action and his command is extremely vulnerable to Nazi or Jap attack.

Adequate and efficient communications between ships and landing craft, between ships and aircraft, between selected landing craft, and between ships and parties ashore is another major item to be stressed during our amphibious training. And this is more than a matter of dots, dashes, and codes. The procedure followed by each service is quite different and a common technique must be learned—and learned well.

Amphibious operations do not permit of a second try when the first fails—we cannot withdraw, lick our wounds, and try again. We must succeed the first time, and we must train with that in mind. Ace-high teamwork is needed and, since each landing will reveal details of our technique and tactics, the enemy will profit by experience and develop stronger defenses. These, in turn, can only be overcome by even better teamwork by our air, sea, and ground forces.

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Some Like It Cold

By Captain Richard G. Hubler, USMCR

Signal Corps photo.

ONE of the few places in the world where the Marines never landed was Iceland. That was true for the first 165 years of the Corps.

On July 7, 1941, in the 166th year, a contingent of Marines came ashore on that bleak little country. They arrived at one of the most critical junctures in the history of the United States.

Most of the world was at war. The Nazi government of Germany had overrun Europe. Britain, although it had flung back the early air raids of the *Luftwaffe*, was yet facing perhaps its most strait hours. The United States, attempting still to maintain its neutrality, was engaged in a bitter fight at home over the issues of intervention.

The government of the country, however, with the implicit approval of Congress and the greater part of the people, had already set its policy on one broad base: the utmost aid to Britain. In maintenance of this, supplies of all descriptions were going across the north Atlantic under convoy (the destroyer *Kearney* was to be sunk in October, 1941, on just such duty). The route, shortest and best despite conditions of weather, lay just under the Arctic Circle and almost within shooting distance of Iceland.

That 40,000-square-mile island had never before assumed strategic importance. But with the commencement of the war of the air it became a point of extreme interest to the major powers. In air miles, it was remarkably central in its location: 2,000 miles from Moscow, 2,550 from New York, 1,450 from Berlin. Indeed, it was no more than 2,900 miles from Chicago and 4,150 miles from San Francisco.

The German general staff had considered the potentialities of Iceland at the beginning of the first World War. Von Schlieffen, the originator of the famous "hinge plan," whereby the German troops were to pivot on the border with the right wing smashing through Belgium and France, had allocated Iceland the rôle of a base from which Cape Cod and Rhode Island in the continental United States might be invaded. Air power made this even more plausible. Karl Haushofer, the Nazi geopolitician and general, put it: "Whoever possesses Iceland holds a pistol permanentaly pointed at England, America and Canada."

The plans for the invasion of Iceland by Germany were not neglected. They were brought up to date when the Nazis invaded Poland in September, 1939. But when Norway resisted the airborne invasion of the enemy for 62 days—longer than Poland or France—and much of the German fleet was lost in battle with the British fleet, the opportunity glimmered.

The possibilities of infiltration remained. According to one authentic story, a plump, redheaded Icelandic girl named Gudrun aided a German pseudo-scientist to make a complete survey of the island. Together they organized a Nordic Society as a cover for their preparations. Meteorological stations were set up at the same time in Greenland —some of which have been only recently discovered.

Britain was aware of the military advantages of possessing Iceland as a base. As soon as the Nazis had captured Denmark, in April, 1940, the British sent a Canadian brigade to that country to secure it. The latter force landed on May 10. A year later the Canadians were replaced by British forces, the last unit of the former leaving just before the American occupation.

On June 24 Winston Churchill, prime minister of Britain, informed the Iceland prime minister, Herman Jonasson, that the British troops were needed urgently elsewhere. He added that the United States was willing to garrison Iceland for their mutual benefit but that the request for such a force would have to originate with the Icelandic government.

Six days later, Jonasson communicated with President Franklin Roosevelt. He asked for an American contingent under eight conditions. These included the recognition of the complete independence of Iceland, indemnities for damages, and needed supplies and ships. It also asked for "picked troops" which would be withdrawn immediately upon conclusion of the war.

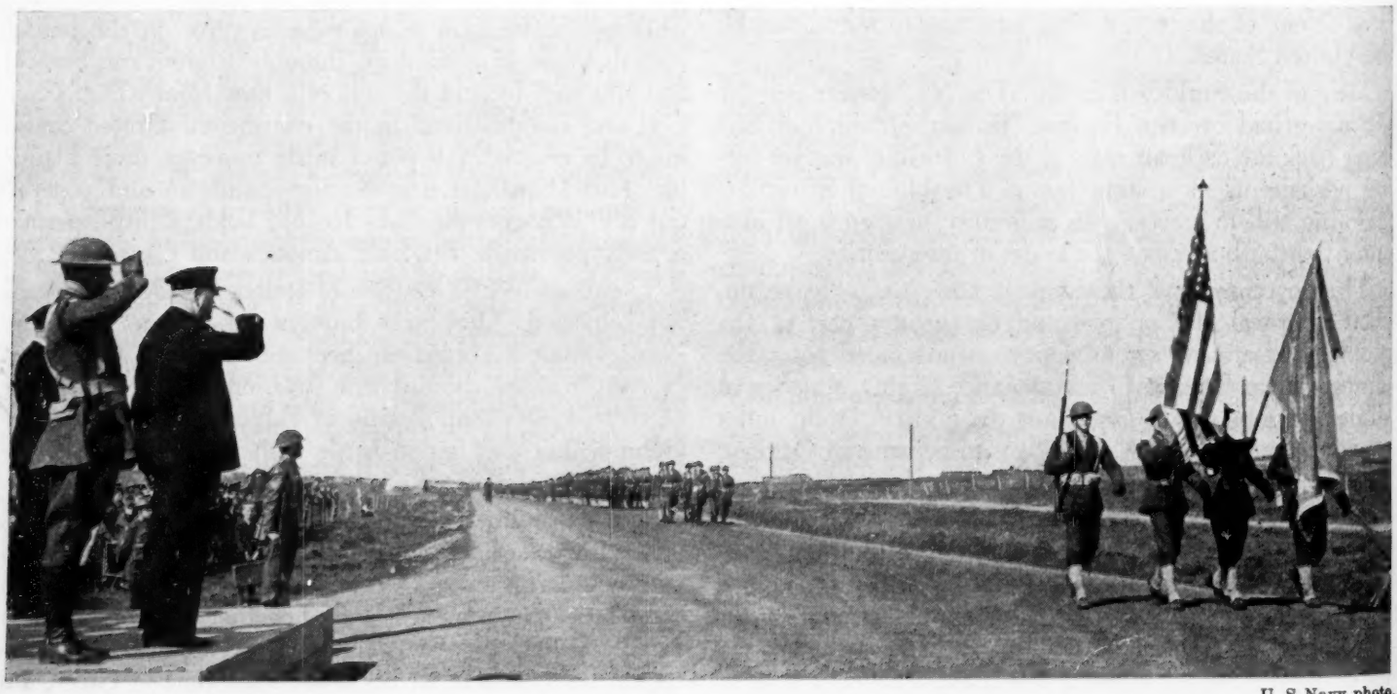
President Roosevelt agreed. The whole affair was merely a formal gesture. The "picked troops" had left the United States already, on June 22, in a convoy. They were the First Marine Provisional Brigade. (The first Army echelon arrived a month later, composed mostly of aviation personnel.) They were instructed to supplement and eventually replace the 15,000 British and Canadian troops billeted there. A few hours before President Roosevelt issued his announcement from Washington, they disembarked at the capital of Reykjavik.

GREAT secrecy covered the movement of the Marines to Iceland. Early in June, 1941, a main threat to the United States was considered to be in the Atlantic and the probable striking direction from South America. The 2d Marine Division, then stationed at San Diego and having less than half its war strength, was ordered to send its best trained-and-equipped reinforced regiment to join the 1st Division on the east coast, presumably to take part in the seizing of important bases in the Atlantic. The Sixth Marines reinforced was detailed for this purpose. It proceeded to the Carribbean area via the Panama Canal. It had scarcely reached the Carribbean when the plans for its use were changed and it, together with the Fifth Defense Battalion which had been formed at Parris Island about six months before, were consolidated into the First Marine Brigade under Brigadier General John Marston. The reasons for the Marines being seized for this purpose, when they were seriously needed for offensive operations which were considered imminent, were not announced. However, it is apparent that the Army units of drafted soldiers could not, under existing laws, be sent beyond the continental limits of the United States except to our own possessions.

The Sixth Marines reinforced proceeded across to South Carolina. Its personnel had been ordered to tropical duty, but the preparation of its personnel for Arctic duty was a dead give-away as to its destination inasmuch as a great deal was then being said about Iceland as the base to protect our communications with Britain. The issuing of long woolen underwear to Marines in South Carolina during June occasioned a good deal of comment.

The President, as commander-in-chief, stressed the fact that the Marines had landed in order to facilitate a three-point program: (1) to protect North Atlantic shipping; (2) to protect the stream of munitions going to Britain; and (3) to prevent possible threats toward Greenland and the western hemisphere.

Jonasson had asked specifically for "sufficient aircraft for defensive purposes wherever they might be required." This, to some, indicated that the Prime Minister of Iceland feared a parachute landing by the Nazis. Perhaps 20 planes, all of them fighters, were sent as a promissory installment of air power. There was some justification of the fear of an



U. S. Navy photo.

Prime Minister Churchill, visiting Iceland in August, 1941, salutes the colors as American Marines pass in review.

Signal Corps photo.

A British soldier receives a commendation from Major General Bonesteel, U. S. Army, as Brigadier General Curtis of the British Army and Brigadier General Marston of the U. S. Marines look on.

airborne invasion such as had paralyzed Norway: on February 10, according to the Berlin radio, the streets of Reykjavik had been machine-gunned by a German fighter.

THE Marines had landed on one of the truly curious spots of the earth, Iceland, which resembles a black and scalloped oyster, is touched on the west by the warm flood of the Gulf Stream. On the north, the downward swing of the Arctic Circle tips it. Nearly 300 miles long and 200 miles wide, it is one of the most intensely volcanic spots in the world. Twenty-five vents have been active within historic times. There are 107 volcanic craters in existence Most of the island is formed of scoriac plains and moun tains knotted and writhed as though formed in the agony of the earth.

The only livable parts of Iceland are the shores of the numberless fjords, the bottomless slits of inlets that break up the coast. Warm springs and raging ice-cold torrents are everywhere.

Many of the 150,000 islanders live by fishing; more, however, live by farming their own little plots of carefully protected soil. Reykjavik is the home of 35,000 of these. Most of the Icelanders are descendants either of the Irish Culdees who lived there prior to 850 or the four Norweigan nobles who settled there soon afterward.

The government of Iceland is possibly the oldest continuous parliamentary system in the world. It was established in 930 and has functioned ever since as the *Althing*. It was in this body during the year 1000 that the heathen and the new converts to Lutheranism had a quarrel over making the latter the Iceland state religion. The president of the *Althing* was bribed by the Christians and the parliament was subsequently baptized.

Until 1261, Iceland was independent. Then Norway was given titular sovereignty. In 1380, fealty was made to Denmark. In 1928, the control of the king of Denmark over Iceland was made nominal by an act passed by the *Althing*. Upon the German conquest of Denmark in 1940, Iceland declared her complete independence.

Britain, since her captains raided Iceland for purposes of trade and shelter in the 18th century, maintained a paternal interest in the country. Early in the 19th century, an order in council proclaimed protection for "our stranger friends," the official designation for Icelanders.

Americans showed a more ingenuous attitude toward Iceland. In 1811, the journal of one traveler who landed there reported: "As to the features of the ladies, the generality of them were assuredly not cast in nature's happiest mold. Some of the old women were the very ugliest mortals I have ever seen; but among the younger ones there were a few who could be reckoned pretty."

The Marines had their chance to find out—but not until the first difficulties of making Iceland over into a base had been overcome. The harbor was the first problem.

Prior to the British arrival, the facilities of the port of Reykjavik were sufficient to meet Icelandic requirements. The British increased freight demands one hundred per cent and adjustments were made. The coming of the Marine and Army units again more than doubled the need for facilities. The Marines established the local record for unloading a ship. To the wondering ejaculations of the Icelanders, using ninety trucks and three shifts they emptied a large transport in three and a half days in July. The best that could be done by others was ten days.

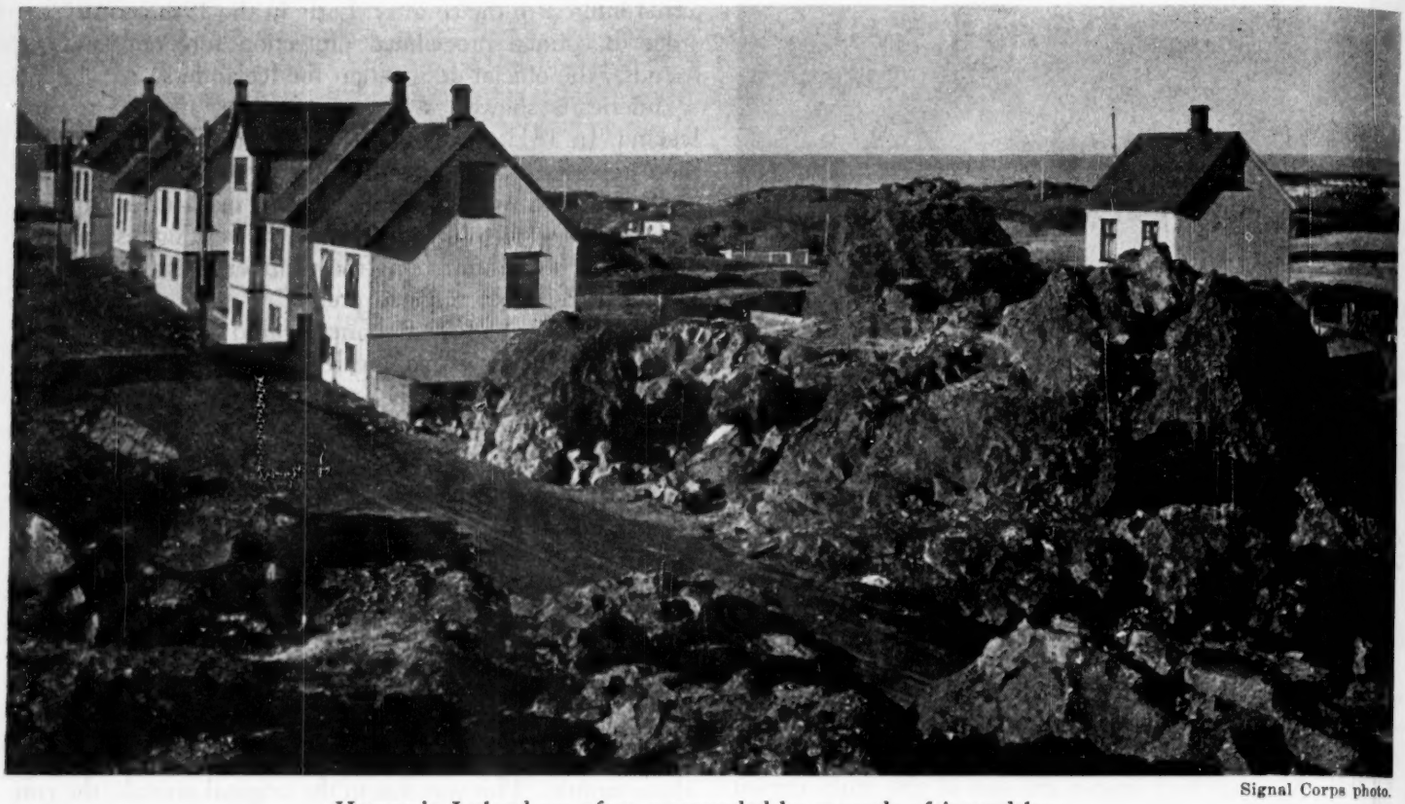
The harbor situation continued to be acute for more than three months. This was due to the original arrivals, the continuing flow of supplies (averaging 43,000 tons for the Icelanders, 28,000 for the British, and 40,000 tons for the United States as late as December, each ton taking up 40 cubic feet of space) and increased troop movements in the fall of 1941.

Marines of the First Brigade stationed in Iceland were under Brigadier General John Marston. The combined American command was finally assigned to Major General Charles H. Bonesteel of the Army.

THE living conditions in Iceland left a good deal desired. The quarters consisted mostly of the dark-red, round Nissen huts, 30 feet long and 12 wide heated by pot-bellied stoves; four officers or ten enlisted men were the

Signal Corps photo.

U. S. Marines in Iceland firing a 3-inch antiaircraft gun with a range of 12,000 feet.



Signal Corps photo.

Houses in Iceland are often surrounded by mounds of jagged lava.

average per hut. The messing and heat facilities, until late November, were inadequate and unsatisfactory. The summer breezes of Iceland faded. Rain, at the rate of 50 inches or more a year, and low temperatures made the climate dank as a cold shower. Ankle-deep mud mired trucks and Marines alike. The food, all of it imported, was plentiful and good. The laundry was scrubbed in the local hot springs.

The wind presented a problem. It was never zephyric; most of the time it verged on gale force. On one occasion, in January, 1942, it hit 129 miles an hour and blew down several of the iron-sheeted Nissens. It also blew a captain into barbed-wire. It took three men to cut him loose.

Cold-weather clothing—fur caps, sheepskin coats, high-tooped boots and mittens—was issued to all hands. But the captious weather, sometimes rising as high as 70 degrees and always humid, made this dress often a sweat-suit.

The weather also prohibited much outdoor exercise. But in spite of limited facilities for athletics or recreation—the large Red Cross hut provided most of the latter—the morale was kept to a high standard by the inauguration of competition for promotions in both enlisted and commissioned personnel.

Movies, shown in the four larger camps of the Marines three times a week on 35-millimeter projectors, drew audiences of 500. Two 16-millimeter projectors made the rounds of the smaller camps with attendances averaging 100. The camps were spread over an area of many square miles.

UNTIL October the Marines were allowed unusual liberty. Fifty per cent of the command got daily liberty, 25 per cent local and 25 per cent in Reykjavik, until the beginning of October. Thereafter 10 per cent went on liberty daily with 30 per cent set free on weekends. During January and February, this was abruptly curtailed: Reykjavik had an epidemic of mumps.

The Sundhollin Baths, a swimming pool in Reykjavik, was reserved at special hours during the week. Drinking was done under strict rules; only eight ounces of hard liquor was allowed per customer. Prices rose considerably after the occupation. Scotch, which originally cost the same as in the United States, gradually rose to a peak of a dollar a drink. Beer remained near-beer with only one percentum of alcohol. An illicit drink was "hell's breath," a concoction of industrial alcohol and coloring matter sold in the waterfront dives.

The Lindergata gymnasium in the capital was also used by the Marines for boxing, wrestling, calisthenics, gymnastics, and Iceland handball. Twenty per cent of the command usually took part. A little over 2,000 books was made available to all Marines plus the 150,000 volumes in the Iceland library in Reykjavik and the volumes of the University of Iceland. The latter, however, being mostly in the runes of the original Icelandic, were of little aid to morale. This is understandable when it is realized that the name of a rather short-titled insurance company was Sjovatryggingarfjelag.

Language difficulties between the natives and the Marines, however, presented no problem. The male Icelanders would not speak to any troops except on pressing business. The girls did not expect the visitors to learn the language. Instead, they learned "okay" and "sweetheart." The Marines devised their own terminology for tongue-twister names. A fjord named Hvalfjordur became Valley Forge; Reykjavik became Rinky Dink.

The girls, most of them blondes with the same beautiful complexion that travelers had remarked upon 100 years before, were well-liked. They went dancing every night with

the men from nine to eleven at the Hotel Borg in the capital but there was little romance. Both the Iceland government and the Marine command thumbed down any marriage ties. And the weather—dark at 9:30 in the morning and dark again at 3:30 in the afternoon in winter and light almost 24 hours a day in the summer—conspired to stifle love. As one Marine put it, "the cold in winter puts the chill on woo, and, in the summer, if you get a good day, it's light all the time and there's no shelter."

There were 85 cases of motor accidents. Most of these resulted from arguments between the British, who drove on the left, and the Marines, who drove on the right. All were settled amicably.

THE strategic mission of the Marines in Iceland, protecting the western part of the island from German invasion, was so vast that it was impossible to hold even key positions protecting landing beaches. A system of observation of probable landing places was set up. The Marines were formed into mobile columns for the purpose of rushing to the area where the Germans might attempt to land.

The particular job of the First Brigade was to patrol and defend approximately 85 miles of the Iceland coast. This included operations with tanks, the manning of antiaircraft batteries, the constant mounting of the various posts, the preparation of defense installations such as road blocks, land mines, tactical wire and camouflage. Much of the work of the early months comprised the erecting of Nissen huts for Marine and Army personnel, unloading of cargo ships and preparation for the severe weather of winter months.

"In general," reported General Marston, "the training of the brigade as a unit was not satisfactory." He added, however, that this was due entirely to climatic conditions beyond control and that individual proficiency had reached a high degree.

The Fifth Defense Battalion was attached to the 1st Provisional Brigade. It was disposed during the occupation in Iceland principally for antiaircraft defense in Reykjavik and for the defense of Reykjavik airdrome. Its installations were set up principally on the tops of hills in the area it was assigned to protect. Being unable to pronounce the Iceland names, the Marines renamed most of these hills to suit themselves—such as Quantico Hill and Arlington Hill. The battalion was sheltered in seven different camps. It was the first of a number of Marine defense battalions to be assigned to Iceland defense. It was withdrawn on February 28, 1942.

The brigade band whiled away part of the tedium. Its twenty-eight members went on tour to each camp. Another break in the routine was the visit, on August 16, of Prime Minister Churchill. In the company of the First Sea Lord, Admiral of the Fleet Sir Dudley Pound, the Chief of the Imperial General Staff, General Sir John Dill, and the Vice Chief of the Air Staff, Air Chief Marshal Sir Wilfred Freeman, Churchill reviewed British and American forces.

Exactly a month later, the second echelon of the Army arrived under the command of General Bonesteel. Eight days later the First Brigade was detailed for duty under his command.

Though medical facilities were limited and bathing was "not particularly comfortable," the health and hygiene of the Marines were considered excellent. Two officers a day and an average of 43 enisted men per day were treated for minor ailments in sick bay. There was a high percentage of sprains and bruises due to the rocky rough of the volcanic Iceland soil. There were four death and only four cases of venereal disease.

Battle activity was almost nil. There were a half dozen false air raid alarms; from the twelfth of July to the 18th of November, the British reported that five enemy submarines were sunk and twelve damaged. The *Kearney* incident and the landing of the survivors in Iceland supplied a further fillip of excitement.

On the 16th and 17th of September, two unidentified planes were picked up, one circling over the main Kaldadarnes airport. On September 23d, another plane identified as a German Heinkel III, was seen on the east coast as well as another on the westernmost tip of Iceland. Neither was intercepted or seen further.

On March 8, 1942, the First Brigade, less the Third Battalion of the Sixth Marines which had sailed on the last of January, took ship for the United States. On the same day they were returned to the jurisdiction of the Navy. On March 25th, they disembarked and were returned to their home stations.

They had finished their job. Iceland was no longer the critical spot of the North Atlantic. Its sovereignty was considered safe. The back of the Nazi submarine offensive had been broken. What they had done, unspectacularly and efficiently, was now part of the Marine archives of the war.

"Greater Love . . ."

THIS is the graphic story of Private First Class Henry Gurke, who sacrificed his life by falling on a Jap hand grenade to protect a buddy.

In an early morning hour of November 9, Privates First Class Gurke and Donold G. Probst were in a foxhole together on the front lines along the Piva Trail, on Bougainville when the Japs attacked.

"Gurke had a submachine gun and Probst had an automatic rifle," related Second Lieutenant Charles W. Flanery, leader of their platoon. "Both were firing steadily at the Japs who started using hand grenades. During a lull in the fighting, Gurke turned to his friend, saying that if the Japs attacked again to keep up the firing and that if a grenade fell into the foxhole he need not worry about it. During subsequent firing a Jap grenade fell at the edge of the foxhole. Gurke dropped his weapon and threw his body over the grenade. His action permitted Probst to keep his weapon in operation for it then was badly needed. Gurke apparently had made up his mind to do exactly what he had done because he had told his friend he would protect him.

"Henry Gurke was a real Marine. They don't come any braver."

Morale for Everybody

A Message for the Home Front

BY COLONEL CHARLES A. WYNN, USMC

Commanding Officer, Recruit Depot, Parris Island, S. C.

NO one can tell you exactly what morale is. Everybody can tell you when the morale of a man, woman, child, group or a nation is high, low, or intermediate. When a nation's morale begins to crack, history has shown, its bastions also crack.

The morale of this nation has always been high. Whether it remains high, and wins this war, depends entirely on *you!* That may be a startling conception, but it is the true one. We've found it out here at the Recruit Depot, Marine Barracks, Parris Island, where, under the aegis of Major General E. P. Moses, it is our task to turn civilians from every walk of life into Marines who can capture places like Guadalcanal and Tarawa, with or without help, and hold them with or without relief.

Here a man's life is turned topsy-turvy. The effect is much the same as if a man given to seasickness were dropped into a Link Trainer and given the works. A man who has never learned discipline must live by it. A man who has never been able to get along with his fellows must learn to be part of a team composed of many fellows he wouldn't speak to on the outside. He finds, when he buckles right down to it, that his fellow-Americans are a pretty good crowd of fellows. It may come as a surprise to him. That's because he's never analyzed himself—as a man or as an American. Here, also, men with inflated egos learn that all men are created equal—though ambition and ability can do away with seeming equality as time passes. It does a vain man good to mingle with his fellows and realize the vexations of vanity.

It takes a growing awareness of personal morale to endure it at first.

Here men who have never had to "take it" march and drill under a blazing sun which they know to be not nearly as hot as the same sun when they actually fight under it in the Southwest Pacific. And sometimes they drill in driving rain which is mist compared to the rains of the tropics which seem to pour from the wide-opened floodgates of heaven. Here they march, sometimes, and drill, in mud that clings and clings, but is nothing compared to the snake and eel-infested swamps of the many islands they must take from the Japanese.

"This is nothing," they are truthfully told. "Here you get only your basic training. At your next base you'll find out what *real* training is. Here you make an eight mile hike and feel sorry for yourself. Chances are, at your next place, you'll simply start hiking, and keep it up for days on end, sleeping where you drop at night, too tired to eat."

IT takes morale to bear up under the present and to anticipate the future. Our people have it. Your sons. Your brothers. Your fathers. Your husbands. Your sweethearts. Your sisters, too. That takes in just about the whole family, including *you!* But we'll get to you a bit later, when we've made plain just what morale *is*.

"You have countless adjustments to make," we tell the recruit, within a day or two after his arrival, "many personal battles to fight. We'll help you with all of them, except one. That's one you'll have to fight, and win, yourself. We have the machinery to compel outer obedience. We can't touch the inner man if it refuses to obey. We can do as leaders in the armies of other nations do, make robots of you, force you into a pattern. The fact that we do nothing of the kind—as the Japanese have, with rare perception for them, noted in their little books, and snapped with their little cameras—makes our team invincible. We take that inner man and the outer man, when *you've* brought them into a measure of union, and help you to help us to weld them into a Juggernaut. A Juggernaut with wings, a Juggernaut with wheels."

That takes a bit of study. We found that out when we tried to make it clear, especially to men who didn't care to listen or to learn in the first place. A very few, thank Heaven, which makes our task certain of accomplishment. The malingerer is a rare bird in our armed forces, comparatively speaking.

"You who have never done anything you didn't want to, now must conform," we tell all newcomers. "And in order to do it *you* must exercise command, beginning *now*. You must take that man you brought, reluctantly or otherwise, into the Marine Corps, and compel him to obey *you!* You analyze yourself. Can you take it? Must you? Do you conform? Do you rebel? Do you just try to get by? Do you stay out of trouble? Do you make a perfect record of service? No one can handle any of this for you but yourself. Your gorge may rise when you have to sit elbow to elbow with strangers in the messhall. But remember, the man on your right may save your life before the year is out; you may save the man on your left. Be reconciled to him,

MORALE—What is it? You can't see it, or hear it, or touch it; yet it is vital to success in any military operation. Without it an army is nothing more than a mob in uniform. And it is equally important to the civilian population in a total war. Colonel Wynn, whose job is making Marines out of boots at Parris Island by instilling into them morale as well as military skill here passes on some valuable lessons for Marines and civilians as well.

knowing he is fighting exactly the same battle with himself as you are fighting, sincerely or rebelliously, according to your light, with yourself. Take yourself by the scruff of your neck, spiritually, where you are always the strongest, *and win your own fight!* Then *our* fight is won before we begin it."

There's the answer to morale, not only for the civilians we are turning into Marines at Parris Island, but for everybody. How many times have you heard people say:

"The morale of the country is shot to pieces!"

"The morale of the miners has gone glimmering!"

"Our shop has no morale left!"

"My morale is low today!"

The man who says that, the woman who says that, or even *thinks* it, contributes to the lack and the further lowering of morale.

"I can't take it!" wails a recruit on his second training day. "I'm just not man enough."

A drill instructor hears him, saunters up.

"I couldn't take it, either," he says quietly. "I *knew* I'd never get through Boot Camp. What a long time ago that seems now. I've marched back and forth across half the Solomons since then, crossed a big ocean twice—and am *still* not sure I can take it."

TAKE it or not, the recruit can "get" it. He grits his teeth. He looks around at his buddies to see if they are ashamed of him. Then he realizes that they feel as he does, but have been waiting for somebody else to say it. Result. Everybody takes it, and comes up able to take anything that comes after it. That's *American,* an intangible something built on the ability of many forbearers to take it.

A chain is as strong as its weakest link, a convoy is paced to its slowest member, a unit is as strong as its weakest Leatherneck. Therefore it behooves that weakest one to be as strong as his inner man can make him. So, he fights—and as he fights his strength grows, *his morale is heightened.* It isn't painted on by us; it comes from inside him. Just so does morale come from inside a nation, a platoon, squad, production unit, mine, city, county or a private home. A nation is made up of individuals. So are all units composed of human beings; a fact that doesn't really need to be pointed out. A nation is composed of you and you and you, whoever and wherever you may be in that nation, whatever you may be doing.

If you find it necessary to shake your head over the condition of the nation, the production line, the shop or the factory, you are shaking your head over your own morale. And within you there is a sure remedy for lowered morale. Fumble around inside and you'll find it, and enjoy—after a few twinges—the enlightening aspect of self-analysis. How do *you* feel? If you feel low, *change;* it's in your power, and in the power of no other human being, as far as you are concerned. If you feel high, spread it; it will inspire others to ask how come, give you a chance to paint a bright picture, and help them to find at least a little bit of themselves by looking at it.

Is this pollyanna? Most simple truths are, as we have proved here at Parris Island. The speaker who can reach into the intestinal investiture of a group of men, and inspire them to realize their own inner abilities, can take men who have marched until they can't march another step—and lead them twenty miles on a forced march. The *speaker* doesn't do it: he simply reaffirms their own knowledge of their own prowess, marches off, and they join him. They don't *follow* him; they *join* him, a vastly different thing.

See the good side of the news, however slight it may appear to be. See the morale on the credit side of your neighbor's ledger, no matter how big he insists his debit is—and point it out to him as diplomatically as possible. He may think he hates you for it, but if he hates you enough he'll think of what you say—and are. See all the high morale you possibly, sincerely can, in your shipyard, shop, factory, village, city, home—and see what you can do to heighten it further. Rather, what you can do to inspire each man and woman and child you see, to heighten his own. Individuals make up all those units.

WHETHER you realize it or not, if just your own morale is high, and you keep it that way, you actually heighten the morale of your nation! Maybe a fraction too small for anybody to notice but you, but if *you* know, a great deal has been accomplished. Your aura spreads around you, touching more people than you know, and through them reaches strangers you'll never meet, yet whom you vitally influence. Remember that when you are inclined to pull a long face, or not to care about getting to the job on time, or feel like audibly and openly criticizing people in high positions, whose labors are Gargantuan compared to yours, you lower a nation's morale, and that nation is the one you are supposed to love above everything except your God and your family.

We inspire men to build platoon morale and our worries end where that platoon is concerned. All the warlike details take care of themselves, become routine; but are worked out with snap and precision because of high *morale.*

I keep my morale high and that of thousands of men is kept high. It goes right down to the newest recruit. If my morale is low and I can't seem to raise it, I go fishing—and discover that my absence doesn't lose the war before I've whipped lowered morale and got back on the job.

When my morale is high my organization clicks. I strive to keep it clicking.

I'm not the best example in the world. Neither, perhaps, are you. But if both of us work at it we can work wonders, I've found.

Your morale is vital war material.

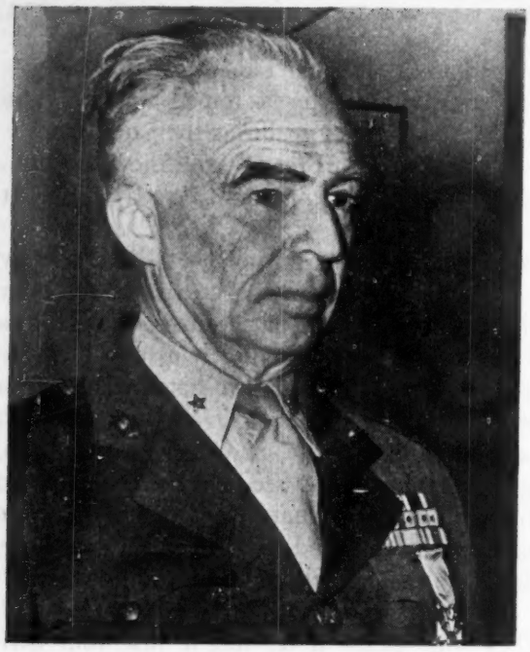
Develop it.

And while you're at it, send some of it to your loved ones in the service whenever you write. If they feel that your suffering is too great to be borne they may wish to come home before victory is won, in order to bring you relief from hardship obviously greater than theirs. The enemy may come trotting along behind them, if this ever happens.

I'm not joking at this point. Too many letters to lads in uniform stress the great sacrifices the folks at home are making to feed and clothe them. Maybe so, but at least the folks at home are a few steps further away from death than many of the lads whose morale they thus send tobogganing into the depths.

After thinking it over, how's your morale?

★ NEW ★ MARINE GENERALS



Major General DeWitt Peck, USMC

Brigadier General Gerald C. Thomas, USMC

PROMOTION of the three Marine Corps generals pictured on this page has been announced recently.

Major General DeWitt Peck has been promoted to that rank and designated Assistant Commandant. The picture shows him as a brigadier general, at the time of his decoration with the Legion of Merit medal, which he is shown wearing.

Brigadier General Gerald C. Thomas, who was General Vandegrift's executive officer in the field, has been named Director of the Division of Plans and Policies at Headquarters Marine Corps, Washington.

Brigadier General Merritt A. Edson, who was chief of staff when the Marines took Tarawa, is shown pointing out significant features of that campaign to reporters in a press conference at Headquarters.

Brigadier General Merritt A. Edson, USMC

Decorations and Commendations

NAVY CROSS

Major Leonard K. Davis, USMC:

"For extraordinary heroism as Commanding Officer of a Marine Fighting Squadron in combat against enemy Japanese forces in the vicinity of Guadalcanal, Solomon Islands, on November 11, 1942. When a hostile attacking force of twenty bombers and thirty Zero fighters approached Henderson Field, Major Davis personally led a flight of twelve fighters to meet the enemy. Making contact one hundred miles northwest of Guadalcanal, he and his flight boldly penetrated the screen of enemy fighters and shot down eighteen of the hostile bombers and fifteen fighter planes. Although suffering from wounds and with his plane damaged by a direct hit in the cockpit, he personally accounted for two of the Japanese fighter aircraft destroyed, while his flight dispersed the remaining forces of the enemy. During his entire tour of duty at Guadalcanal, Major Davis is credited with the destruction of five enemy planes. His valiant leadership, cool courage, and gallant devotion to duty were in keeping with the highest traditions of the United States Naval Service."

Major Frederick R. Payne, Jr., USMC:

"For extraordinary heroism as member of a Marine Fighting Squadron in aerial combat against enemy Japanese forces over Guadalcanal, Solomon Islands, during September and October, 1942. Throughout that strenuous period when the island airfield was under constant bombardment and our precarious ground positions were menaced by the desperate counter thrusts of a fanatical foe, Major Payne repeatedly patrolled hostile territory and intercepted enemy bombing flights. With bold determination and courageous disregard of personal safety, he pressed home numerous attacks against heavily escorted waves of invading bombers, and, in five vigorous fights against tremendous odds, he shot down a total of six Japanese planes. His superb flying skill and dauntless initiative were in keeping with the highest traditions of the United States Naval Service."

Captain Edgar J. Crane, USMCR:

"For extraordinary heroism as Commanding Officer of a company during initial landings on enemy Japanese controlled territory in the Solomon Islands Area, August 7-9, 1942. After leading his men to the successful completion of a dangerous and important mission on Florida Island, Captain Crane withdrew his company and proceeded by water to reinforce the attack on Gavutu and Tanambogo Islands. Although menaced by the withering blasts of hostile weapons, he brought two of six boats in to attempt a landing but was forced by extremely heavy machine-gun fire to remain in the water for four hours before he was able to get ashore, completely unarmed. With the small number of men still under his command, Captain Crane obtained arms from friendly troops and continued action against the enemy. His aggressive fighting spirit and courageous devotion to duty, maintained despite great personal risk, were in keeping with the highest traditions of the United States Naval Service."

Captain Francis E. Pierce, Jr., USMCR:

"For extraordinary heroism as a fighter pilot attached to a Marine Aircraft Group in combat against enemy Japanese forces in the Solomon Islands Area on January 11 and 15, 1943. On January 11, Captain Pierce accompanied eleven other fighter planes escorting dive bombers ordered to strike at enemy shipping off New Georgia Island. As Japanese fighter planes fiercely attacked our bombers and threatened the success of our mission, he daringly engaged the enemy and by his cool courage and expert marksmanship shot down two hostile aircraft and assisted in driving off the remaining planes, thereby insuring the success of the dive-bombing attack. While taking part in a similar mission on January 15, he was piloting one of fifteen fighter planes when twenty-four enemy fighters attacked our dive bombers. Although wounded severely in both legs and with his plane badly damaged, Captain Pierce, with utter disregard for his own personal safety, boldly countered the attack and personally shot down three of the eleven Japanese planes destroyed during the engagement. His superb airmanship and indomitable fighting spirit were in keeping with the highest traditions of the United States Naval Service."

First Lieutenant Gregory K. Loesch, USMCR:

"For extraordinary heroism while attached to a Marine Aircraft Group in action against enemy Japanese forces in the Guadalcanal Area, Solomon Islands, from October 9, 1942 to January 5, 1943. During this prolonged series of intense enemy activities, First Lieutenant Loesch, participating both as wingman and division leader in numerous hazardous patrols, fighter sweeps and attacks, displayed superb airmanship against great odds. As a result of his outstanding professional skill and unfaltering determination, he successfully destroyed six hostile planes in the first part of the period. Later, while patrolling, the four-plane fighter division commanded by First Lieutenant Loesch shot down four enemy dive bombers and a Zero, he himself accounting for one of the planes. His dauntless courage and valiant devotion to duty under extremely adverse conditions were in keeping with the highest traditions of the United States Naval Service."

RIBBON AUTHORIZED FOR HOLDERS OF LETTERS OF COMMENDATION

The Secretary of the Navy has authorized a Commendation Ribbon to be worn by Navy, Marine Corps, and Coast Guard personnel receiving individual Letters of Commendation in this war. It will take precedence next in importance to that representing the Air Medal.

Such letters must be signed by the Secretary; the Commander in Chief, U. S. Fleet; Commander in Chief, U. S. Pacific Fleet, or Commander in Chief, U. S. Atlantic Fleet. Those issued in the future must state the desire of the issuing officer to accord the ribbon-wearing privilege to the recipient. The right to wear the ribbon is accorded automatically to present holders of Letters of Commendation from those listed above for acts of heroism or service performed since December 6, 1941.

The ribbon will be the standard size of Navy service ribbons—one and three-eighth inches wide by one-half inch long. It will be of myrtle green, with a white stripe (three-sixteenths of an inch wide) insert one-eighth of an inch from each edge.

The ribbon will represent the first Letter of Commendation issued for the person wearing it. Each succeeding Letter of Commendation will be represented by a bronze star on the ribbon.

First Lieutenant Walter X. Young, USMCR:

"For extraordinary heroism as Communications Officer of a Parachute Battalion, in action against an enemy Japanese force on Gavutu, Solomon Islands, August 7, 1942. During the extremely dangerous initial landings on Gavutu, First Lieutenant Young, on his own courageous initiative, fearlessly attacked several of the enemy in a single-handed attempt to neutralize a dugout which commanded a portion of the dock and constituted a grave menace to his comrades. Although fully aware of his imminent peril, he determinedly continued this voluntary action until, while affecting a daring entrance, he was wounded by rifle or pistol fire from within the dugout. First Lieutenant Young's heroic spirit was in keeping with the highest traditions of the United States Naval Service."

Second Lieutenant Cecil J. Doyle, USMCR:

"For extraordinary heroism as a pilot attached to a Marine Fighting Squadron in combat with enemy Japanese forces in the Solomon Islands Area from October 18 to 25, 1942. Pressing home his attacks against the enemy with skill and determination, Second Lieutenant Doyle shot down five Japanese aircraft during this period, thereby contributing materially to the security of our forces in that area. His cool courage and indomitable fighting spirit were an inspiration to all the members of his squadron and were in keeping with the highest traditions of the United States Naval Service."

Second Lieutenant John J. Smith, USMCR:

"For extraordinary heroism while attached to a Marine Battalion, during initial landings on enemy Japanese-controlled territory in the Solomon Islands Area, August 7-9, 1942. When reinforcements were urgently needed elsewhere, Second Lieutenant Smith and his company withdrew from positions on Florida Island where a dangerous mission had just been completed, and proceeded by water to assist in the attack on Gavutu and Tanambogo Islands. Although menaced by the withering blasts of hostile weapons, he attempted to land but was forced by ex-

Major James N. M. Davis is pictured (right) receiving the Legion of Merit medal from Lieutenant General A. A. Vandegrift, Commandant. Major Davis (then a captain) was second in command of the Second Raider Battalion on Guadalcanal. The ceremonies were held at Camp Elliott, San Diego, Calif., where he is stationed as an instructor for the Amphibious Corps Pacific Fleet.

tremely heavy machine-gun fire to remain in the water for four hours before he was able to get ashore. With the small number of men still with him, Second Lieutenant Smith immediately obtained arms from friendly troops and, although suffering a painful wound, participated in a vigorous action which forced the enemy to retire. His aggressive fighting spirit and courageous devotion to duty, maintained despite great personal risk, were in keeping with the highest traditions of the United States Naval Service."

LEGION OF MERIT

Brigadier General Field Harris, USMC:

"For outstanding services as Chief of Staff to Commander Aircraft, Solomon Islands, from April 1 to July 25, 1943. He utilized available air units to inflict upon the enemy the maximum losses in aircraft and trained personnel and the most severe damage to costly airport installations and shipping. His conduct under frequent air attacks and various undesirable health and living conditions was at all times not only an outstanding example of courage and devotion to duty, but a constant source of inspiration to all hands, and thoroughly in keeping with the highest traditions of the United States Naval Service."

Colonel William J. Whaling, USMC:

"For exceptionally meritorious conduct in the performance of outstanding service to the Government of the United States while serving on the Division Staff of the First Marine Division on Guadalcanal, Solomon Islands, during September and October, 1942. Requesting and receiving permission to organize a scout-sniper detachment, Colonel Whaling supervised the training of selected groups in scouting, stalking, and ambush tactics, affording his men practical experience by leading them on hazardous missions deep in hostile territory. By his skillful instruction and his expert knowledge of jungle warfare, he contributed immeasurably to the success achieved by our patrols in important operations against the Japanese. His courageous initiative and inspiring leadership were in keeping with the highest traditions of the United States Naval Service."

Major Harold B. Meek, USMCR:

"For exceptionally meritorious conduct in the performance of outstanding services at Guadalcanal from March 1 to June 1, 1943. In addition to his duties as Communications Officer of a Marine battalion, Major Meek voluntarily assumed the responsibility of constructing, in the quickest possible time, the permanent telephone line from Henderson Field to Koli Point, sorely needed at the time for an important operation. He coördinated the efforts of the various detachments of personnel with such efficiency that the entire project over the dense jungle terrain was completed far earlier than was expected. Through his unusual ability and tireless energy, Major Meek added materially to the island communications system and the successful operations."

SILVER STAR

Lieutenant Colonel Herman H. Hanneken, USMC:

After Lieutenant Colonel Hanneken had brought his battalion into a position on the beach east of Metapona River, an outnumbering hostile force effected a landing near his flank and succeeded in establishing a beachhead for future operations. Although extremely handicapped by an untenable position, the battalion, in a desperate fight against tremendous odds, inflicted heavy casualties upon the Japanese landing force until Lieutenant Colonel Hanneken withdrew to a more advantageous position and launched a successful attack during action against these forces on Guadalcanal, Solomon Islands, on November 2 and 3, 1942.

Captain Lyman D. Spurlock, USMC:

As Commanding Officer of a company in a Marine Division, during action against enemy forces on Guadalcanal, Solomon Islands, on August 18-19, 1942, Captain Spurlock, assigned the task of capturing Matanikau, led his men in a strenuous flanking maneuver through five miles of exceptionally difficult terrain. He and his company took the enemy by complete surprise, killing seventy Japanese, and capturing large stores of supplies.

Captain Harry L. Torgerson, USMCR:

While attached to a Parachute division in action against enemy Japanese forces during the invasion of Gavutu, Solomon Islands, August 7 to 9, 1942, Captain Torgerson, with valiant disregard for his imminent danger, executed his essential duties, which involved action against dugouts still occupied by the enemy, with outstanding skill and dauntless courage. He persevered until he had destroyed the designated hostile positions.

First Lieutenant William L. Culp, USMC:

Acting as Assistant Wing Communications Officer of a Marine Aircraft Wing in action against enemy Japanese forces at Guadalcanal, Solomon Islands, from November 14, 1942 to January 22, 1943, First Lieutenant Culp personally supervised the installation, maintenance and repair of vital telephone and radio communications, often exposing himself to severe enemy bombing and artillery fire in order to perform his essential duties more effectively.

First Lieutenant Michael R. Yunck, USMCR:

While attached to a detachment of a Marine Observation Squadron in action against enemy Japanese forces in the Solomon Islands from October 26 to December 10, 1942, First Lieutenant Yunck displayed superb airmanship, participating in numerous hazardous missions and serving as leader of an eight-plane flight of fighters during the latter part of the period.

Second Lieutenant Harold A. Hayes, Jr., USMCR:

While attached to a Battalion in action against enemy Japanese forces during the invasion of Gavutu, Solomon Islands, August 7 to 9, 1942, Second Lieutenant Hayes displayed exemplary courage and skill in leading his men in attacks against strong hostile positions and was the first to enter each cave contacted by his detachment.

Second Lieutenant Russell E. Nall, USMC:

While serving with a Defense Battalion in action against enemy Japanese forces at Tulagi, Solomon Islands, on August 10, 1942, Second Lieutenant Nall, hearing the cry of a marine some distance away, unhesitatingly fought his way against withering machine-gun fire to locate the wounded man, carrying him to safety and saving his life.

Second Lieutenant Stephen K. Pawloski, USMC:

While attached to a Marine Unit during action against enemy Japanese forces on Guadalcanal, Solomon Islands, on December 20, 1942, Second Lieutenant Pawloski and two other men came suddenly under the fire of heavy rifles and machine guns. When one member of the patrol was wounded so severely that he was unable to move, Pawloski, though injured at the same time, crawled back through a dangerously exposed area in order to remove the man to safety.

Second Lieutenant Wayne F. Sanford, USMCR:

While attached to a Marine Battalion in action against the Japanese during the invasion of Tanambogo, Solomon Islands, August 9, 1942, Second Lieutenant Sanford, in the face of intense hostile fire, led two of his squads on a daring charge up the steep and perilous slope to attack the hidden enemy. He maintained his leadership and was the first to gain

the hill's crest where he fought so skillfully against the desperate foe that the Japanese snipers were dislodged and destroyed.

MARINE GUNNER GEORGE H. SLYE, USMCR:

While with a Marine Division during the assault on Tulagi, Solomon Islands, August 7, 1942, Marine Gunner Slye exposed himself to the withering blasts of hostile weapons in order to launch a daring attack on a cave which concealed a number of the enemy. He plunged through the entrance, engaged the occupants in perilous hand-to-hand combat, and succeeded in killing all the Japanese encountered.

PLATOON SERGEANT HARRY M. TULLY, USMC:

While serving with a Parachute Battalion during the invasion of Gavutu, Solomon Islands, on August 7-8, 1942, Platoon Sergeant Tully fought a lone mission for two days and nights against hidden Japanese snipers, exposing himself in order to draw their fire, and displaying marked skill in killing all of the hostile force whom he encountered upon locating their exact positions.

GOLD STAR IN LIEU OF SECOND DISTINGUISHED FLYING CROSS

MAJOR ROBERT H. RICHARD, USMC:

As Commanding Officer of a Marine Scout-Bombing Squadron during action against enemy Japanese forces in the Solomon Islands Area from November 1942 to January 1943, Major Richard led eighteen out of a total of thirty raids launched by his squadron against hostile shipping and ground installations in addition to participating in numerous search flights and special aerial missions which yielded valuable information concerning the enemy.

FIRST LIEUTENANT HERBERT A. PETERS, USMCR:

While attached to a Marine Observation Squadron in action against enemy Japanese forces in the Guadalcanal Area, Solomon Islands, from January 9, 1943 to February 1, 1943, First Lieutenant Peters displayed outstanding professional skill, participating in numerous hazardous combat missions.

DISTINGUISHED FLYING CROSS

MAJOR HARRY F. BAKER, JR., USMC:

While attached to a Marine Aircraft Group as pilot of a naval transport plane during heavy attacks on Henderson Field, Guadalcanal, Solomon Islands, by enemy Japanese forces on October 15, 1942, Major Baker effected a successful landing and, with valiant disregard for his own safety, remained in an exposed position to help unload his valuable supply of bombs, oxygen, and gasoline which had been badly depleted by enemy fire.

MAJOR WILLIAM R. CAMPBELL, USMC:

As Flight Leader of a Marine Observation Squadron in action against enemy Japanese forces in the Solomon Islands Area from October 26, 1942 to January 26, 1943, Major Campbell led his combat group on numerous hazardous missions against Japanese surface and aerial forces and shore installations.

MAJOR HENRY C. LANE, USMC:

As pilot of a naval transport plane attached to a Marine Aircraft Group in action against Japanese forces in the Solomon Islands Area, October 14 and 15, 1942, Major Lane, although seriously handicapped by the badly damaged runways at Henderson Field, Guadalcanal, landed his plane with its dangerous heavy loads of vitally needed gasoline, bombs, and oxygen, assisted in unloading the cargo and in the difficult placing aboard of wounded personnel, and effected a skillful take-off.

CAPTAIN ELMER L. GILBERT, USMC:
FIRST LIEUTENANT DANIEL L. CUMMINGS, USMCR:
SECOND LIEUTENANT JOHN E. HAYS, USMCR:

While attached to a Marine Aircraft Group in action against enemy Japanese forces in the Guadalcanal Area, Solomon Islands, on January 2, 1943, the above-named officers pressed home their vigorous attacks on ten hostile destroyers steaming toward Guadalcanal with such skill and accuracy that they scored direct hits on the rapidly maneuvering destroyers.

CAPTAIN ARTHUR M. MORAN, USMCR:

While participating in aerial flight as a pilot with a Marine Scout-Bombing Squadron during action against enemy Japanese forces in the Solomon Islands Area, February, 1943, Captain Moran led dive-bomber flights through intense antiaircraft fire against two task forces of twenty destroyers each to sink a heavy destroyer leader and another vessel and severely damage a third hostile ship.

FIRST LIEUTENANT JOHN W. BEEBE, USMCR:

As pilot of a dive bomber attached to a Marine Aircraft Group during aerial flight against enemy Japanese forces in the Solomon Islands Area on February 2, 1943, First Lieutenant Beebe fearlessly participated in a daring attack upon an enemy task force of twenty destroyers, personally scoring a direct hit on the stern of a rapidly maneuvering Japanese destroyer and assisting greatly toward her sinking three minutes later.

FIRST LIEUTENANT MARION K. COHENOUR, USMCR:
FIRST LIEUTENANT ELTON MUELLER, USMCR:
SECOND LIEUTENANT GORDON L. ALLEN, USMCR:
SECOND LIEUTENANT AUGUSTUS L. ARNDT, USMCR:
SECOND LIEUTENANT ALBERT L. CLARK, USMCR:
SECOND LIEUTENANT HOWARD C. FRAZER, USMC:

While attached to Marine Aircraft Groups in action against enemy Japanese forces in the Solomon Islands and New Georgia Islands from November 12, 1942 to January 29, 1943, the above-named men pressed home vigorous attacks on hostile ground installations and enemy aircraft and transports.

FIRST LIEUTENANT ANTHONY J. TURTORA, JR., USMCR:
SECOND LIEUTENANT EDWARD P. ANDREWS, USMCR:
SECOND LIEUTENANT FRED E. GUTT, USMCR:

While participating in aerial flight as fighter pilots against enemy surface forces in the Solomon Islands Area from August 20 to October 14, 1942, these men boldly engaged the enemy, destroying several hostile fighters and a bomber and strafing transports, despite extremely heavy antiaircraft fire.

FIRST LIEUTENANT EDWARD OCHOA, USMCR:

While attached to a Marine Scout-Bombing Squadron during an air

AIR MEDAL
Designed by Walter K. Hancock

raid against enemy Japanese forces in the Solomons on February 27, 1943, First Lieutenant Ochoa led a vigorous and successful interception attack against one hostile troop transport and two corvettes bearing down upon Kolombangara Island. He boldly maneuvered his flight to score smashing hits which left the transport and one corvette lying dead in the water and burning furiously.

SECOND LIEUTENANT RICHARD D. HARING, USMCR:

While attached to a Marine Fighting Squadron in action against enemy Japanese forces on Guadalcanal, Solomon Islands, on September 13, 1942, Second Lieutenant Haring, in spite of the fact that he had just completed a long, tiring, and difficult over-water flight, volunteered to intercept a formation of twenty-eight enemy bombers and twenty fighters.

SECOND LIEUTENANT KENNETH A. WALSH, USMC:

Against enemy Japanese forces in the Solomons from March 3 to April 1, 1943, Second Lieutenant Walsh pressed home his attacks with aggressive fighting spirit and utter disregard of personal safety, taking part in numerous flight missions against hostile shipping, shore installations and fighter aircraft.

NAVY AND MARINE CORPS MEDAL

CAPTAIN ROBERT B. FRASER, USMC.
CAPTAIN HENRY S. MILLER, USMCR.
FIRST LIEUTENANT CAROL BERNARD, USMCR.
SECOND LIEUTENANT JOHN T. STRANDWITZ, USMCR.

AIR MEDAL

CAPTAIN JENS C. AGGERBECK, JR., USMC.
FIRST LIEUTENANT GORDON L. ALLEN, USMCR.
FIRST LIEUTENANT ALBERT L. CLARK, USMCR.
FIRST LIEUTENANT AUSTIN WIGGINS, JR., USMCR.
SECOND LIEUTENANT JEFFERSON J. DE BLANC, USMCR.
SECOND LIEUTENANT JONES G. HERRING, USMCR.
SECOND LIEUTENANT ORRIN R. HOMME, USMCR.
SECOND LIEUTENANT CHARLTON A. MAIN, USMCR.
SECOND LIEUTENANT WILLIAM J. MORGAN, USMCR.
SECOND LIEUTENANT ARTHUR F. O'KEEFE, USMCR.
SECOND LIEUTENANT EDWARD K. PEDERSEN, USMCR.
SECOND LIEUTENANT JAMES L. SECREST, USMCR.
SECOND LIEUTENANT KENNETH A. WALSH, USMC.
STAFF SERGEANT THOMAS J. QUINN, USMCR.

LETTERS OF COMMENDATION

By Secretary of the Navy:
FIRST LIEUTENANT NORMAN G. HENDERSON, USMC.

By Commander, South Pacific Area and South Pacific Force:
MARINE GUNNER ALVIE D. GODWIN, USMC.
MARINE GUNNER MALCOLM A. HILL, USMC.

By Commanding General, Headquarters, Marine Division, Fleet Marine Force:
MAJOR KIMBER H. BOYER, USMCR.
CAPTAIN PETER I. OLSEN, USMCR.
FIRST LIEUTENANT GRAMMER G. EDWARDS, USMC.
FIRST LIEUTENANT VINSON A. MCNEILL, USMC.

Four-Star General
(See cover illustration)

LIEUTENANT GENERAL Thomas Holcomb, Commandant of the U. S. Marine Corps, was promoted to the rank of General on January 1, 1944, when he was succeeded as Commandant by Lieutenant General Alexander A. Vandegrift, and will be retained on active duty by the President of the United States for an important assignment. He is the first Marine Corps officer to hold the rank of full General.

In a letter to General Holcomb announcing his elevation to the rank of General, Secretary of the Navy Frank Knox said:

"Upon retirement, having been specially commended for performance of duty in actual combat by the head of the executive department under whose jurisdiction such duty was performed, you will be placed upon the retired list with the rank of General, and with the pay and allowances authorized by law for the highest rank, that of Lieutenant General, held by you while serving as Commandant of the Marine Corps.

"I have previously expressed to you my appreciation of your exceptional services as Commandant of the Marine Corps and my regret at your separation from that office," the Secretary said. "There is another thought I desire to convey at this time. You will be the first officer of the Corps to hold the rank of General—the highest rank in our armed forces. I know of no other officer to whom that distinction more fittingly belongs. You take with you in your retirement the admiration, the affection and the best wishes of the entire Naval Service."

Second Division Commended

HEADQUARTERS, FIFTH AMPHIBIOUS CORPS,
c/o FLEET POST OFFICE, SAN FRANCISCO

13 December, 1943.

CORPS GENERAL ORDER NUMBER 66-43 — Commendation, 2d Marine Division, for seizure and occupation of Tarawa Atoll.

1. The Commanding General takes great pride in commending the officers and enlisted men of the 2d Marine Division, Reinforced, for their outstanding achievement in the seizure and occupation of Tarawa Atoll, during the period of November 20th to 24th, 1943.

2. In this action, the 2d Marine Division forced a landing against strongly fortified and stubbornly defended positions on the atoll, and then continued the attack, in spite of heavy losses, with such vigor and determination that the Japanese garrison was annihilated. The seizure of Tarawa Atoll has given our forces a valuable base from which further operations can be conducted against our enemies in the Central Pacific.

3. In the accomplishment of the assigned mission, the officers and enlisted men of the 2d Marine Division displayed courage and intrepidity of the highest order which will serve as an inspiration to all ranks of the U. S. Marine Corps.

H. M. SMITH,
Major General, U. S. Marine Corps,
Commanding.

MILITARY DIGEST

New Outposts in the Pacific*

JAPAN'S mandated islands are to go to the United States after this war. America also is to be granted a military base on Formosa, which is to be restored to China. Decisions as to both points were reached at the Cairo and Teheran conferences of Allied leaders, according to published reports which have not been officially denied.

This means that a general redistribution of power in the Pacific is due to follow Allied victory over Japan. The war is to mark the rise of the United States to that of the leading Pacific nation. It is to mark the fall of Japan as a Pacific power. The Pacific is to be dominated by the countries that are allied against Japan.

The war thus enters a new phase for the U. S. Until now, American forces have been fighting to drive the Japanese from territory seized from the Allies. But now American forces are going to fight for islands that Japan long has treated without interference as her property. These islands are the ones which the U. S. had won but refused to keep after the war with Spain. They were sold by Spain to Germany, were seized by Japan in the first World War, and were mandated to her in 1919 by the League of Nations.

The three groups comprise more than 600 islands. They are the tops of mountains that go ever deeper into the waters of the Pacific as they extend away from Asia. One group reaches southward like steppingstones from Japan itself. Two others extend eastward for nearly 3,000 miles from the Philippines across the mid-Pacific.

The Marshalls are coral atolls resting on the crests of twin chains of sunken peaks. Japan has bases on Jaluit and Kwajalein and strong defenses on Mili, Wotje, Taroa, Maloelap.

The Carolines are higher, more rugged, stronger strategically. In them, Japan has a long string of powerful bases. These are on Ponape, Truk, Yap and in the Palau Islands. U. S. forces are preparing to move on them from several directions.

The Marianas are a 400-mile chain of steep, volcanic islands. Guam, the southernmost, was owned by the United States, but was left unfortified and fell like a ripe plum to the Japanese. North of Guam, on Saipan, Japan has a powerful base.

Possession of the mandated islands by the United States would mean a complete reversal of their use in the Pacific. In the war, each base after capture would be turned against Japan. Each would help smash Japan's air, sea and land power.

After the war, the islands, economically of small importance, would provide air bases for a network of air lines crisscrossing the Pacific. Those bases can serve as police stations for keeping the Japanese under control. The base on Formosa would guard South China. That and posts in the Philippines would cut across Japan's path to the Indies and all Southeast Asia. British recovery of Singapore, Japan's loss of all holdings on the Asiatic mainland, and America's heavy fortification of the Aleutians and Hawaiian Islands will complete Japan's encirclement.

*Digested from the *United States News*, an independent weekly magazine on national affairs, January 14, 1944.

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Admiral Halsey*

ADMIRAL HALSEY came back here this week—the man who has been directing a major part of the fighting of the United States Navy—the man who symbolizes the fighting spirit of the American Navy in the Pacific. And yet how many citizens saw him and how many people know of his presence? Certainly by all standards of measuring achievement, Admiral Halsey has done far more already than did Admiral Dewey at Manila Bay. He took a tough assignment at a time when things looked dark for us in the Pacific and he gradually brought out a sizable section of our fleet to face the Japanese in the South Pacific, so that it is now the Japanese who remain in hiding avoiding battle and husbanding their defensive strength—for they no longer hold the offensive.

Admiral Halsey received another medal from the Secretary of the Navy, and had a brief interview with the President. There is no lack of appreciation anywhere here in official quarters for the fine job done in the South Pacific. But this way seems to be so different—the public doesn't seem to have the opportunity to show its appreciation. Admiral Halsey came here quietly—probably he preferred to be left to attend to his own affairs. But it would have been fitting if both houses of Congress had received him and given him a mark of personal appreciation which is so important nowadays to the fighting men. For it is not their commanders but the men who fight under them who thus go unrecognized.

The Pacific war has been a tough war to date and will be a tougher one in the months to come. Admiral Halsey has the grim courage which makes him a natural leader. He, it will be recalled, escorted the aircraft carrier that approached Japan and sent Doolittle's raiders to bomb Tokyo. He was given command of the Navy in the South Pacific about sixteen months ago. . . . Admiral King . . . one of the most notable of the unsung heroes of this war, sensed the situation (in the South Pacific) and sent Admiral Halsey to take charge. He knew that Admiral Halsey's qualities fitted the problems and the situation exactly. When Admiral Halsey took hold the United States forces had just begun the Solomon Islands campaign. Critics called it "island-hopping." But it was more than that. It was a well-calculated plan to take over islands that would give us air bases. Today the plan stands out as virtually accomplished. We have driven the Japanese out of the Solomons or rendered untenable the few positions left. Meanwhile, General MacArthur, coming up from New Guinea and

*By David Lawrence in the Washington *Star*.

the left flank, has reached into New Britain with troops and into New Ireland with bombing planes. We are at last face to face with the open Pacific in the southern sector. We are on the way to the Philippines and we threaten Truk and the Japanese right flank in the Pacific.

Coincidentally, we are approaching the enemy in mid-Pacific and, when the weather gets better in the summer, we will be approaching from the north as well. The entire Navy is gathering strength for the steady series of blows that must be inflicted on the Japanese Navy and bases on the way to Tokyo. It may take two or three years more—the distances are large and the supply problems are unprecedented in their difficulties—but thanks to the brave men who have given their lives in the South Pacific and thanks to those who remain out there on our ships, alert and vigilant against Japanese activities, the situation is so much better than it was sixteen months ago that the whole nation could well breathe a sigh of relief and say thanks to Admiral King and particularly to his staunch commander, Admiral Halsey. It has been a joint operation—Army, Navy and Marine Corps. Admiral Halsey likes to see all members of the armed services in the same khaki uniforms. He thinks of them all as the United States team, and his coöperation with General MacArthur has been such that it furnishes an example of what unified command can do when the commanders are able and disinterested.

The chances are that some day out of the South Pacific experience many a historical narrative will be written which will evaluate the contribution made by Admiral Halsey and the naval, air and marine forces under him. As he goes back to the Pacific to the grim business of command in what may prove decisive stages of the war, the good wishes of his countrymen should go with him. For if there can be no applause from the street in this war as he rides by, there can at least be words of appreciation to a really heroic leader of an American force.

* * *

Tank Destroyer Battle Experience*

LIKE other components of the ground forces, tank destroyers have not been confined to any one particular theater or to any one front. They have been spread around the globe and used to advantage whenever employed. Their first great test, however, was in the Tunisian campaign where armored forces played a particularly important rôle It was in Tunisia that the TD's hacked out for themselves a reputation for straight-shooting, aggressive battling, and it was there that the Nazis and Italians came to call them the "American Tourists" (because of the extensive traveling they did to meet armored thrusts) or the "Quarter-inch Bastards" (because of the light quarter-inch armor on the M-3 half-track destroyer).

Tank destroyers were in on the beginnings of the big fight at Bataan and Guadalcanal. Fifty M-3 destroyers (half-track-mounted 75's) were sent to the Philippines in the summer of 1941. They fought effectively against the Japanese invasion force, knocking out light Japanese tanks, defending beaches, and acting as mobile artillery. An observer who was evacuated during the last days of Corregidor stated that the Nipponese could not have landed at either Lingayen or Lamon Bay had a sufficient force of TD guns been available to defend the beaches. This same observer believed that the TD's figured prominently in prolonging the defense of Bataan beyond the tenth day.

The general conclusions drawn from the Tunisian experiences show that the tank destroyers employed their flat trajectory, high velocity weapons with unusual accuracy both in direct and indirect fire missions.

Battlefield experience has proven that the development of the tank destroyer, initially the M-3 and then the M-10 and now a new and improved weapon, has justified its existence. Their record stands for itself: in Tunisia, tanks destroyed, 137; 88's knocked out, 18—a conservative estimate from available official records.

*From *Military Review*, December 1943.

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The Use of the Rocket*

ACCORDING to tradition, the principle of the rocket has been known for seven hundred years. The principle of the war rocket, however, as opposed to the garden variety or Fourth of July specimen, was not worked out until forty years ago by a Russian scientist. Since that time experimentation has gone on intermittently. Nearly a dozen new weapons, based on the idea of propellant charges exerting their force with the projectile itself, have been produced in the past three years. There is the bazooka, the British multi-barreled antiaircraft guns, the German rocket bombs and rocket mortars, as well as the various rocket weapons of the Russians.

The rocket, a hundred years older than the gun, is efficient because it eliminates the problem of recoil, stresses, and heating within the gun itself. It makes possible batteries of light arms and tremendous destructive power, together with a fair degree of accuracy. It is believed that most military rockets are propelled by the slow burning or lazy explosive powders which often take as long as two seconds to complete oxidation. These include nitrocellulose or smokeless powder, various mixtures of gunpowder, and perhaps liquid fuels.

The extreme range of the rocket varies widely from two thousand to six thousand yards. It is able to hurl unusually large shells. A 50-pound projectile is one of the smallest. The extreme velocity of rocket shells give them an unusual penetrative power. It is not unusual for a 20-pound rocket to attain a velocity of 2,000 feet per second, within the range of a mile, with only eight pounds of propellant behind it.

Rockets have been used both on the ground and in the air. The chief use in Russia has been against German tanks. The German use of the rocket has been confined largely to its efforts to break up the flights of Flying Fortresses over Berlin. The theoretical effectiveness of such being dropped, either upon planes or the ground beneath, is evidenced by this example. A 220-pound rocket bomb would warrant a booster charge of 11 pounds in a drop from a plane travelling 200 miles per hour, one thousand miles up, the bomb,

*A condensation of Leonard Engel's *Rocket* published in the January, 1944 *Infantry Journal*.

which would ordinarily travel at 375 feet per second, would travel, under rocket propellant, at 650 feet per second, a circumstance which would nearly quadruple its striking power.

The fact which has prevented more extensive use of such weapons in this war is the relative inaccuracy of the rocket, due to draft imperfect propellance and shifts in the weight of the projectile due to the consumption of fuel.

* * *

Service of Supply, Southwest Pacific*

PRACTICALLY all rations for the American Army in the Southwest Pacific are procured locally. American agricultural experts and engineers have helped to revolutionize the food canning industry of Australia and large quantities of canned foods are made available for American forces. The problem of clothing the troops is unusual in that practically all men have to be completely reoutfitted upon their being withdrawn from active operation. The Army SOS operates hospitals which are pushed as close to the front as possible. Malarial control is one of the major tasks of the medical service.

The service of supply in the Southwest Pacific in general follows that prescribed by Field Service Regulations. The conditions in the theater are, of course, not the same for which those regulations were written, and it has been necessary to make some changes to meet the local conditions, but fundamentally the basic principles have been followed.

Australia has been divided into base sections in which the supplies brought over from the United States and purchased locally are stored. In New Guinea the SOS has established advance bases under an advance section. The supplies are brought from the base sections in Australia to the advance bases by boat. They are stored in these advance bases until they are needed by the combat troops, when they are sent forward to beachheads by small boats, trawlers and landing craft.

In both cases we have the communications zone divided into base sections for storing supplies in large quantities. In both cases we have an advance section storing supplies for distribution to the combat troops. In the Southwest Pacific, however, instead of a narrow line separating the advance section from the base section, we have from one to two thousand miles of water. The transfer of supplies from the base to the advance section instead of being a matter of hours, or at the most a day or two, is a matter of weeks. This means that the level of stocks in the advance bases of New Guinea must be considerably higher than the levels that we teach for an advance section.

The distribution of supplies from the advance section to the rail head in the combat zone is replaced by the distribution from the advance bases by boat to a beachhead farther up the coast or on a nearby occupied island. This movement might have been controlled by a regulating officer in accordance with the book, but actually is controlled by the Advance Base Transportation officer who is responsible, in conjunction with the Navy, for the operation of the small ships.

*From the *Military Review*, January, 1944.

BOOK REVIEWS

Any books reviewed may be obtained at publishers' prices from The Marine Corps Association, Headquarters U. S. Marine Corps, Washington 25, D. C.

THE GROWTH OF THE RED ARMY. By D. Fedotoff White. Princeton: Princeton University Press. 486 pps. $3.75.

THIS book is undoubtedly one of the most important studies in military sociology which has appeared in many years. The author has given us an impressive background of Russian military experience and analyzes the stuff of which the mighty Red Army has been made. The book is a study of the organizational growth of the armed forces of the Soviet, of the groups within them, and of the conflicts and conflict situations which have arisen among these groups.

The Red military services have been in existence over twenty years and have undergone several basic changes during that time. From the militia of the early Red Guards and the anarchistic bands of sailors and local guerillas, the Red Army has grown into a large regular military force with a professional officers' corps, a strict military discipline, an almost unequalled fighting tradition with battle-scarred banners, and many distinctive organizations. Its growth and change have not always been smooth. Treason of officers, mutinies of soldiers and seamen, ruthless execution of the rebellious element, such vicissitudes were those of the early years of the Red Army. Even a few years ago a violent crisis found its outward expression in the execution of Marshal Tukhachevskii, in a purge which involved thousands of officers and political leaders of the Soviet armed forces.

The book presents several analyses of the conflicts which have arisen in the Red Army since its beginning. This is a particularly appropriate approach to the subject because of the peculiar origins of the Red Army and because of the organizational plan adopted by the Soviet to overcome the antagonisms between the commanding personnel and the rank and file of the Army. The Army had many complex groups with conflicting interests, the defense of the Bolshevik idea and the motherland. Most of the conflicts within the army, of course, had their roots in the origin and the development of the Soviet dictatorship.

Chapters are devoted to the inheritance by the Red Army from the army of Imperial Russia and the early stages of the attempts of the Soviet to shape their military forces. A chapter

deals with the Kronstadt Rebellion during the early days of the Red Army, the most serious threat that the Soviet dictatorship has faced since the overthrow of the Czar. Considerable space is devoted to the early stages of the development of the Soviet military doctrine or the philosophy of war. This analysis throws an interesting sidelight on the rivalries and ambitions of the several groups within the army. As the basic doctrine of the Communistic leaders of Russia changed, the army was forced to adapt itself to the changes in thought and conditions. Several long chapters are devoted to the analysis of the changes in the leading groups within the army. These groups were the officer corps, the political commissars, Communistic groups such as the youth movement, and last, but not least, the rank and file of soldiers. Tensions and stresses within each group, between them, and between the groups in the army and the state are discussed at great length.

The problem of armament and technical equipment of the Red Army has no part in the work except insofar as it affected its organizational growth. The author admits that he is not attempting to write a general history of the Red Army. The book does not give us any of the many important changes which the Red Army has undergone since the attack of Germany on Russia.

The author has had a most unusual career. He was assistant naval attaché for Imperial Russia in Washington during the first World War. He was later a lieutenant in the British Navy, a lieutenant commander under Admiral Kolchak, for a time a prisoner in a Soviet concentration camp, and shortly thereafter, was offered the chair of naval art at the Soviet Naval War College. He is author of several scholarly studies on Russia. For a number of years, he has been a leading citizen of Philadelphia and has been manager of the office of the Cunard White Star Line in that city.

The book has considerable value to anyone making a serious effort to understand Russia, but it presents a rather confusing impression if one is seeking for only a superficial knowledge of what is going on or how the Russian army developed into its present state of huge strength and high efficiency. To understand the Russian Army of today, a further study of the impact of World War II upon that military force is necessary.

CLYDE H. METCALF.

* * *

THE STRUCTURE OF MORALE. By J. T. MacCurdy, Sc. D., M. D. New York: The Macmillan Company, 224 pp. $2.00.

MILITARY PSYCHOLOGY. By Norman C. Meier. New York: Harper Brothers. 395 pp. $3.00

THESE two books appearing almost simultaneously, the first in England and the second in the United States, deal with the same subject and the same material, but in absolutely different ways. The first book is a series of lectures given to officers of the British Army; the second is a careful textbook prepared for young officers in the United States.

Dr. MacCurdy, asked to step aside from his technical work of instructing in the selection and training of personnel in the army and talk on more general subjects, began to lecture on those subjects on which the men were asking questions. The talks widen out from the specific answers to those pressing questions in all men's minds: questions on fear under fire and its conquest till they impinge on almost all fields of knowledge which in any sense are of importance to the military man. The war has acted as a sharp focus to bring to men's attention whole areas of human endeavor and organization to which they were formerly indifferent. Since Dr. MacCurdy writes, as he talks, in a clear but not simple prose, and because he fills his pages with illustrations taken from the battlefields and cities of the nations involved in this war, his book is pleasurable, even exciting reading, and the answers that the author gives are the answers to the questions that almost every officer asks.

Professor Meier proceeds from the very sound assumption that modern war is such a complex matter that soldiers and officers must be more competent and more effectively trained than ever before, and that these men and the civilian populace behind them must be sustained by a complete knowledge of what they are fighting for and just what they are fighting against. His book explains those psychological principles and methods that are being used to train the soldier today, and discusses in some detail the psychological qualifications for leadership, the bases for battle neuroses, and the whole question of national drives and ideologies. The book concludes with a section devoted to a series of searching questions on the text designed for self-study. Each chapter has an effective and detailed bibliography of pertinent materials. This is a book that can profitably be studied; it is an introduction to a new field of knowledge and a guide and primer to deeper acquaintance with it.

The Structure of Morale has used a new and vital interest aroused by the war to range over the whole field of human knowledge from the broadest implications of sociology to an exact little study of why there must be so much paper work done in the army; in other words, it is a new method of approach to education made possible by the sudden change of values that war has brought about. *Military Psychology* applies well-tried and well known principles of psychology to the task of constructing a civilian army. It is an introduction to a method rather than to a new point of view. P. D. C.

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BASIC MANUAL OF MILITARY SMALL ARMS. By W. H. B. Smith. Harrisburg: The Military Service Publishing Company. 213 pps. $2.00.

HERE is the last word apparently on the principal small arms of all the leading military powers. Its coverage of the basic United States weapons is almost as thorough as that contained in our regular ordnance pamphlets and technical manuals. The sections on foreign arms appear to be almost as thorough in covering the subject matter.

Emphasis is placed on the operation of the weapons, their field stripping, and how to use them. The book is profusely illustrated, both with photographs and drawings which show the working parts of many weapons.

It is a book for the expert, yet the subject matter is so clearly presented that the beginner can pick up almost any small arm in the world and with it soon gain an understanding of the weapon. The chief of the Foreign Matériel Section of the Aberdeen Proving Grounds says that "the author is perhaps the one person in the United States with the necessary combined knowledge of firearms, writing, and editing to bring this remarkable book into being." C. H. M.

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A COURSE IN THE FUNDAMENTALS OF ELECTRICITY. By Morton Mott-Smith, Ph.D. Washington: The Infantry Journal, 1943. 126 pp.

FUNDAMENTALS OF ELECTRICITY is one of a series of texts that have been apparently prepared by various publishing companies in consultation with the War Department as pre-induction courses. This sample is effectively printed, is well illustrated both by photographs and diagrams, and is bound in a flexible format of pocket size.

This book in a series of graduated lessons starting from ap-

plications of the principles of magnetism deals with the principles underlying most of the basic electrical contrivances from the simple battery to motors and generators. In no sense does it attempt to teach a trade or a vocation, but rather to give the student who in the course of time may be called upon to repair or operate electrical mechanisms an understanding of the forces behind them.

Officers in charge of technical schools within the Corps could probably use numerous of the books in this series to provide enlisted men with a background of theory that they might not have received in high school.

* * *

Fighting Forces Series: $.25 each

REPORT ON THE ARMY, JULY 1, 1939 TO JUNE 30, 1943, BIENNIAL REPORT OF GENERAL GEORGE C. MARSHALL, CHIEF OF STAFF OF THE UNITED STATES ARMY TO THE SECRETARY OF WAR. Edition: Washington: *The Infantry Journal,* 1943, 271 pp.

HITLER'S SECOND ARMY. By Alfred Vagts. Washing *Infantry Journal,* 1943, pp 241.

ARMY LIFE. By Warrant Officer (JG) E. J. Kahn, Jr. Washington: *Infantry Journal,* 1943, 152 pp.

THE LOST BATTALION. By Thomas Marvin Johnson and Fletcher Pratt. Washington: *Infantry Journal,* 1943, 222 pp.

THE *Infantry Journal* is rapidly expanding its Fighting Forces Series in continuation of its successful experiment to give breadth and depth to the reading of the men in the armed services. It is publishing books that it has itself instigated and edited, and it is putting out new editions of old and new books that may prove of contemporary value. Of the four listed above, two are new editions, one is written particularly for the *Infantry Journal,* and one is a new edition of a contemporary document in this convenient inexpensive form.

General Marshall's document needs no introduction since parts of it have already been widely printed. This handy edition, however, contains the complete text, the interesting notes added to that text, and the whole array of charts that summarize the activities of the army. General Marshall has divided the war and the preparations for it into five phases, and deals with each phase crisply and succinctly, from the first reluctant resolutions that we made when we were going into war sidewise till the time when we could mount our own offensive. Read at once in its entirety, the report gives the reader some idea of the enormity of the task that confronted the nation and the army and of the tremendous difficulties that the army authorities overcame in the teeth of extreme pressure, danger, and lack of time. The book is an encouragement and a warning, and a vindication of democratic strength.

Dr. Vagts has compiled a very valuable reference book for both army and civilian authorities that gives solid details on all the semi-military and quasi-military organizations within Germany, from the well-known Storm Troopers to the lesser known labor and women's organizations. These organizations apparently have a dual purpose: they are to act as feeders to the national army and to war industry; they are also to act as a sort of national police in the emergency of war or civil disorder. The author's comments on the effectiveness of indoctrination are interesting; he raises the very pertinent query of whether the emphasis on blind zeal at the expense of intellectual growth is not the weak point in this whole process of totalitarian organization.

The last two books are an unusual contrast; the first deals with the basic training of one of the first batches of inducted men when war was possible but certainly not thought of as immediate or probable by many citizens. Already the book seems dated and its gentle and wry humor extremely out of place. The second is a careful and detailed study of the famous Lost Battalion episode of the last war, when a large section of troops, cut off from support, with limited amounts of ammunition and almost no food, held their own against superior forces for five days. This book was originally published in 1938; it is particularly appropriate now when several million Americans are intensely interested in problems of combat and the complex matters of leadership. *The Lost Battalion* is the result of excellent teamwork and painstaking research. Thomas Johnson apparently gathered the military data and acted as advisor and interpreter while Fletcher Pratt put everything together in a smooth and effective narrative. They have left out nothing that could be of interest: they show the reader the background of the officers concerned and as far as possible the German side; they are careful to note what upheld the morale of the troops; they have even traced the careers of survivors in an endeavor to mark down the results of such a siege on participants.

P. D. CARLETON.

* * *

COMBAT PROBLEMS FOR SMALL UNITS. Washington: Infantry Journal. 1943, 246 pp., $1.00.

THE effectiveness of any fighting machine must depend ultimately on the efficiency of its smallest unit—for infantry, the squad. The training of squad and squad leader must, however, come from the young officer who should know first of all proper procedure, and next should be able to make quick and accurate decisions. *Combat Problems for Small Units* has been carefully written and specifically edited for the young officer who is preparing himself and his men for combat. The book cannot, of course, take the place of the actual experience of maneuvers; it is not designed to do so, but its use will familiarize the officer who faithfully works out the problems with procedures and situations that he would otherwise have to learn by the wasteful method of trial and error. It is a book to read before and during maneuvers, and probably one to check against after combat.

The authors have set forth 27 problems or situations that demand effective use of the squad in patrols and minor engagements, and in platoon assaults. Some of the chapters deal only in procedure; most of them ask that the reader take definite action himself and offer solutions to problems only after he has had a chance to make his own disposition of his men. The book is ingeniously written with plenty of simple maps and diagrams that obviate continual hunting backward and forward through the pages, and has one unique feature. All the problems involve the platoons or squads of one company; the men appear by name; and the officers and men speak informally and easily: in short, a good many of the conditions of maneuvers or of combat itself are reproduced, and the accurate and painstaking exposition of the field manual comes alive.

Modern doctrine is set forth always; some of the situations have been apparently drawn from combat experiences in Europe. The authors offer solutions of their own, but I suspect that these are not always supposed to be the final or even the correct ones. One object of the book must be to promote hot and healthy argument among those studying it and thereby further their education.

For officers of the Marine Corps the book has one serious failure. It can instruct in judgment; but it does not use situations comparable to those of the South Pacific. The combatants who appear in the book fight in a convenient sort of country, where there are plenty of roads, many open fields, and an equable climate.

P. D. C.

THE NAVY HUNTS THE CGR 3070. By Lieutenant Lawrance Thompson, USNR. New York: Doubleday, Doran & Co., Inc., 150 pp. $1.75.

AFTER Pearl Harbor a larger fleet of patrol and escort ships were needed by the United States to give our shipping all possible protection against submarines lurking in the Atlantic. Among the sea-going men of America were hundreds who had been rejected by the Navy because of physical disabilities; these were the ones who volunteered to join in the fight as Coast Guard Reserves when "Hooligan's Navy" was organized.

This book is the story of nine of these men, blown far out to sea aboard the former *Zaida*, a coastal picket sailing vessel converted into Coast Guard Reserve Boat, 3070. It tells the true experiences of these daring men in their fight to return home; running into one gale after another, tossed about like a leaf in a windstorm; the bitter cold of a snow squall at sea; the pangs of hunger with food running low, and only brackish water to drink; the disappointments of being located several times only to be lost again before rescue came.

The *Zaida* had been the pride and joy of George Ratsey, the famous sailmaker, and it was with deep loyalty to his adopted country that he offered her to the Coast Guard for the duration. She proved to be the ship that he had intended her to be in her fight for life against the powers of the sea and wind. For twenty-one days this gallant yawl faced hurricanes and blizzards to carry her exhausted crew to safety after one of the greatest searches ever conducted in American naval history.

CECILIA M. NADEAU.

* * *

CONDITION RED. By Commander Frederick J. Bell, U. S. Navy. New York: Longmans, Green and Co. 174 pp. $3.00.

CONDITION RED (technical phrase for "battle imminent") is a record of life aboard a destroyer in the South Pacific for upwards of a year since Pearl Harbor, six months of it on one tremendous cruise within the combat area. The author, I think, wants first of all to have the public remember what it is already beginning to forget: the hardships and the terrific battle against odds of that first year in the Pacific, and next to have this public gain some realization of just what the men of the Navy are going through and of how well they are doing what they have to do. There is plenty of high heroism here, but the author emphasizes more heavily the grinding toil of the ceaseless alert.

Commander Bell is an officer of the regular Navy, and in happier times, a historian of it. He realizes keenly how foreign to most civilians life aboard a navy ship must be. To meet that ignorance he has deliberately broken the formal order of his narrative with interludes, sketches, interpolated diaries, and stories that exhibit life at sea, the character of the men aboard ship, and the actual flavor of conflict. This additional material gives a depth and interest to the book that it would not otherwise have. No one can fail to be moved by the solemn roll called over the American and Australian ships sunk off Guadalcanal: "Four hundred fathoms down, on the coral sands of Ironbottom Bay, a vast armada of the Rising Sun rested in eternal eclipse. Near them, guns still trained out, are the graves of the *Astoria, Quincy, Vincennes,* and *Canberra;* the *Northampton, Atlanta;* the *Duncan, Preston Laffey, Walke, Monssen* and *DeHaven;* the *Barton* and *Cushing.* Beneath these quiet waters are thousands of American sailors; their watches over, their duty done. Here are more Japanese ships than were ever before lost in battle, and more American warships than we have lost since the invention of the ironclad." P. D. C.

Pay and Allowances—1792 Style

PAY and allowances as established for the Army in 1792 present an interesting comparison between our present day practices and those of that time.

According to the *Army Register* of 1792, a major general received one hundred twenty-five dollars pay, twenty dollars for forage, and fifteen rations a day per month. A brigadier general was paid ninety-four dollars a month, his forage allowance for that period was sixteen dollars, and he was allowed twelve rations per day. A major's pay was forty dollars a month; he was allowed ten dollars a month for forage and four rations daily. Captains, lieutenants, and ensigns received pay of thirty, twenty-two, and eighteen dollars a month respectively; and while the captain got three rations a day, the lieutenant and ensign were allowed only two each. A chaplain was paid fifty dollars a month inclusive of forage and rations. Commissioned officers, at their option, were authorized to receive money in lieu of rations at the contract price at the posts where due.

Recruits were apparently at a premium in those days, for officers on recruiting service, were entitled to $2.00 for every recruit they obtained.

In the enlisted ranks, sergeants received five dollars; corporals, four dollars; and privates, three dollars a month. All received a six-dollar bounty for enlisting.

Ten cents was deducted from the pay of each enlisted man for hospital stores; in addition, the following amounts were deducted from each pay roll for clothing: sergeants, $1.40; corporals, $1.15; and privates, $0.90. Incidentally, this made the private's monthly income only $2.00.

The daily ration authorized for the Army during that period was as follows: one pound of beef or three-quarters of a pound of pork; one pound of bread or flour; and one-half gill (one-eighth pint) of rum, brandy, or whiskey or its money value where due. For every hundred rations, one quart of salt, two quarts of vinegar, two pounds of soap, and one pound of candles were allowed.

The Army in 1792 had an authorized strength of 104 officers and 2,128 enlisted men, a total of 2,232. The census of 1790 placed the population of the United States at 3,929,214; and on this basis the Army of 1792 provided a ratio of approximately one soldier for each 1,760 people.

—*Military Review.*

* * *

Training for Combat

HERE are a few of the "musts." No matter how the boys may resent it, march the hell out of them UP HILL, with full packs. Few people back home really have any idea what condition means. We have found that practically every sound soldier can be trained to the condition of a creditable marathon runner. Don't spare the horses. The second thing is impress your officers and men with the fact that when their unit is selected to go into action the bell has rung and their turn to give their lives for their country has arrived. You expect every leader to be at the point of greatest danger and you will be up there yourself.

(Extracts from a letter of a battalion commander wounded in Sicily, quoted in *Military Review*)

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FIGHTING FORCES BOOKS

The Jap Soldier

This book is an adaptation of the Army training film, "The Japanese Soldier," and shows through pictures and text how the enemy was brought up, trained, and prepared to fight and die for the Mikado. Will help you enable him to realize the latter part of his ambition.

A History of the War

By Rudolf Modley

Originally prepared for the Army Orientation courses, this book has been extensively revised and brought up to the end of 1943. Tells the story of the first two years of the war in words, maps, and pictographs.

The Battle Is the Pay-Off

By Captain Ralph Ingersoll

Captain Ingersoll does more than describe the battle of El Guettar as fought by the unit of engineers he was with, although he does that superbly. But more important he tells us how big this war is and what we are doing to win it.

How to Abandon Ship

By Phil Richards and John J. Banigan

Two sailors, one of whom has been shipwrecked, here give valuable pointers on every aspect of abandoning ship, including life on a life raft.

Japan's Military Masters

By Hillis Lory

A study of the Jap Army covering its organization, training and indoctrination.

Weapons for the Future

By Capt. Melvin M. Johnson, Jr., USMCR, and Charles T. Haven

A study of the future of American armament.

Guadalcanal Diary

By Richard Tregaskis

A realistic account of jungle fighting by Marines.

Blitzkrieg

By Lt. Col. S. L. A. Marshall

Selected chapters from "Blitzkrieg" and "Armies on Wheels" make this book a comprehensive account of the evolution and tactics and equipment since 1939.

Rifleman Dodd

By C. S. Forester

The story of a trained and self-reliant fighting man.

The Gun

By C. S. Forester

Like "Rifleman Dodd" this novel of the British Peninsular Campaign is a classic in military literature.

The Living Thoughts of Clausewitz

Selected portions of Clausewitz's writings on war explain those "most general elements of war." A new and specially prepared American edition.

Gas Warfare

By Brig. Gen. Alden H. Waitt

A description of war chemicals and chemical warfare tactics.

Americans vs. Germans

Battle experiences of six American fighters in World War I.

These little books, published by the *Infantry Journal*, are ideal for servicemen, especially overseas. Although they are full-length books, they are manufactured to save weight and space, light for shipping and handy to carry, and priced at only 25 cents each. Many of them are available in this edition to service personnel only. Ten of them weigh less than five pounds, and so comply with overseas shipping limitations. Larger quantities may be mailed in several packages.

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The Fight at Pearl Harbor

By Blake Clark

A selection of the battle portions of "Remember Pearl Harbor!" the one book to give a first-hand account of the events of December 7, 1941, in Hawaii.

Report on the Army

By General George C. Marshall

The biennial reports of the Army Chief of Staff from July 1, 1939, to June 30, 1943—the authoritative account of the building of the Army and its campaigns during the first nineteen months of American participation in the war.

How the Jap Army Fights

Detailed description of the training and tactics of the Jap soldier.

Genghis Khan

By Harold Lamb

The story of the great conqueror, the "Emperor of all Men."

Guerrilla Warfare

By Bert Levy

The tricks and tactics of guerrilla fighting.

What's That Plane?

By Walter Pitkin, Jr.

Silhouettes of 83 American and Japanese aircraft with photographs and descriptive text.

Aircraft Recognition

By R. A. Saville-Sneath

Silhouettes and photographs of British, German, and Italian aircraft.

The War in Outline—1939-1943

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Headquarters, U. S. Marine Corps **WASHINGTON 25, D. C.**

THE MARINE CORPS GAZETTE

MARCH, 1944

25¢

MARINE CORSAIRS IN FLIGHT

THEY PUSHED BACK THE SEA

SOLDIERS who sweated through the New Guinea campaign will tell you it was "touch-and-go" at Port Moresby.

Between the Australian troops on land and their supply-ships offshore, there was a stretch of shoal water no large craft could navigate. Every ton of desperately needed cargo had to be brought in on lighters. And all the while Japanese bombers growled overhead, pounding the beach, the lighters and the anchored ships.

Into this desperate situation stepped a battalion of U. S. Army Engineers. Three-quarters of a mile out in Port Moresby Bay they spotted a small island with deep water on its seaward side. They aimed their "Caterpillar" Diesel Tractors for that distant dot of land, and as the big engines roared, the 'dozer blades began shoving dirt out into the bay. In the incredible time of four days they built a solid causeway from shore to island, despite the constant strafing of enemy planes. From that moment, ships were able to come in alongside the island, unload their cargoes and get away.

No other army could have done that job. No army that lacked the mighty earth-moving equipment of the Americans would ever dream of trying it. Yet in the records of the Engineers, there are many incidents just as fantastic-sounding as this one.

All over the world, "Caterpillar" Diesel Tractors, Motor Graders, Engines and Electric Sets have made their own special contribution in this war. Their power, stamina, simplicity and dependability have put a unique weapon in the hands of the Allied forces on every front.

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Caterpillar Tractor Co., Peoria, Illinois

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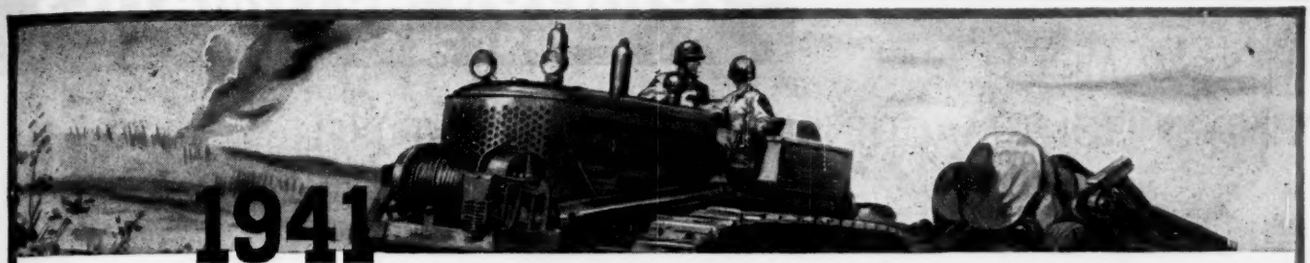
TO WIN THE WAR: WORK—FIGHT—BUY U. S. WAR BONDS!



Nothing changed but the paint

EVERYTHING changed but the paint

LONG before Pearl Harbor the government called International Diesels to the nation's defense. Regulation olive-drab replaced the familiar red, and the big tractors of industry went to war. *Almost nothing was changed but the paint.*

Tens of thousands of these peacetime crawlers are writing war history in stirring action for the Marines, the Navy, and the Army. They're pulling big guns, handling bombs for the Air Forces, smoothing shell-torn landing fields, clearing jungles, building roads, They're tops right now on every fighting front.

But that's not enough for American resourcefulness under the spur of war.

In 1943 a new "prime mover" rolled from the International assembly lines — a tractor in which *EVERYTHING was changed but the paint!*

Victory is its one job, but there'll be a world to rebuild later. Then we'll manufacture the International Diesel Crawlers needed by American industry. International owners will know why Harvester men are saying today: *"We've got a lot of things packed into this big baby that we'll use when the war is over."*

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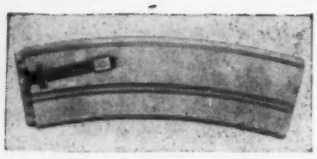
THE NEW MODEL 1944
JOHNSON LIGHT MACHINE GUN OR MACHINE RIFLE

Caliber .30-'06 — Weight 14½ lbs. with mount.

Capacity 25 shots.



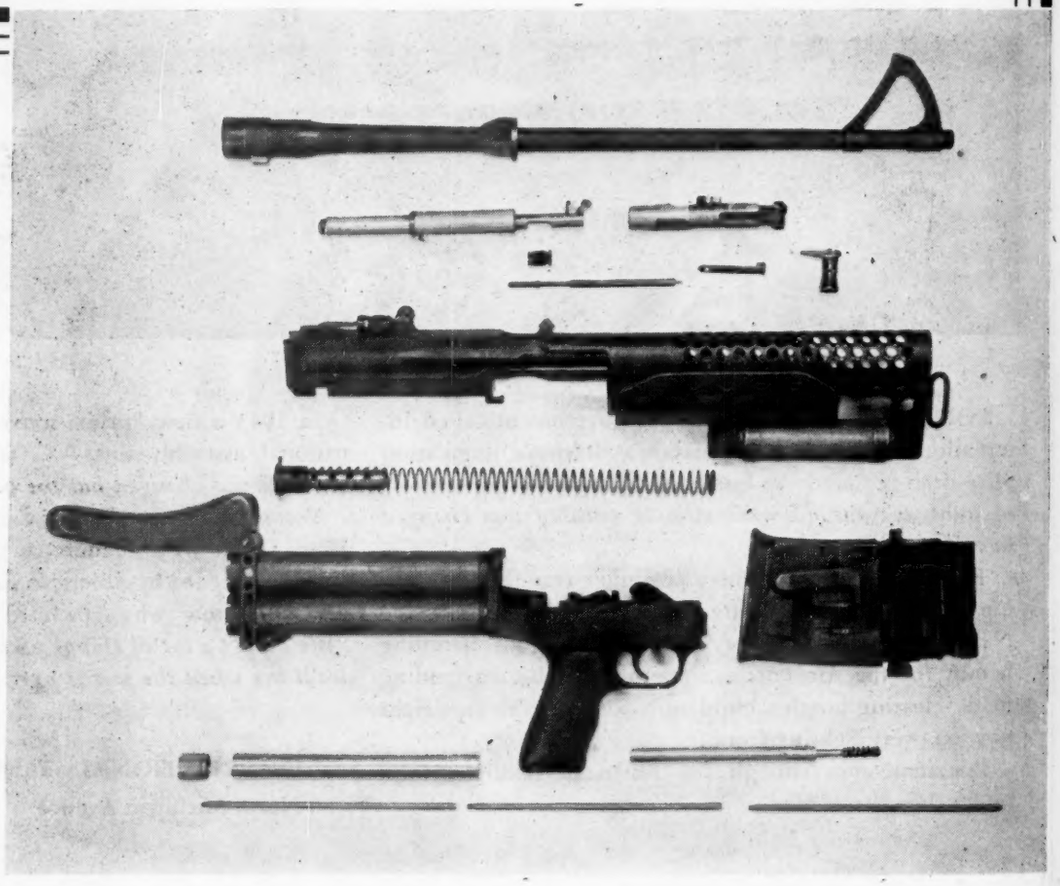
20 shot detachable box magazine— horizontal feed.

The NEW Model 1944 Johnson Light Machine Gun or Machine Rifle is the result of over two years training and combat experience with the original 1941 model.

NEW features include: a folding monopod mount—quicker and simplified barrel latch—elimination of wood by a tubular miscarta stock design—simplified assembly features, etc.

THE MODEL 1944 has been field stripped to its eleven parts in 18 seconds and assembled in 30.

THE 1944 MODEL FIELD STRIPPED



GENERAL INFORMATION ON REQUEST

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